The NCAR/EOL Field Catalog

An Information Repository For Use In Field Projects

Al Cooper

NCAR

Disclaimer:
I'm Just Demonstrating;
Greg Stossmeister et al. are the Architects

GOALS OF THE FIELD CATALOG

Primary Uses:

1. **To collect, at one site, information needed to make decisions.**
2. To provide a convenient repository for the collection of reports on instrument status, mission summaries, etc..
3. To serve information needed during the mission, e.g., by the flight crew.
4. To help analysts understand cases and find appropriate data.

GOALS OF THE FIELD CATALOG

Primary Uses:

1. To collect, at one site, information needed to make decisions.
2. **To provide a convenient repository for the collection of reports on instrument status, mission summaries, etc..**
3. To serve information needed during the mission, e.g., by the flight crew.
4. To help analysts understand cases and find appropriate data.

GOALS OF THE FIELD CATALOG

Primary Uses:

1. To collect, at one site, information needed to make decisions.
2. To provide a convenient repository for the collection of reports on instrument status, mission summaries, etc..
3. **To serve information needed during the mission, e.g., by the flight crew.**
4. To help analysts understand cases and find appropriate data.

GOALS OF THE FIELD CATALOG

Primary Uses:

1. To collect, at one site, information needed to make decisions.
2. To provide a convenient repository for the collection of reports on instrument status, mission summaries, etc..
3. To serve information needed during the mission, e.g., by the flight crew.
4. **To help analysts understand cases and find appropriate data.**

GOALS OF THE FIELD CATALOG

Primary Uses:

1. To collect, at one site, information needed to make decisions.
2. To provide a convenient repository for the collection of reports on instrument status, mission summaries, etc..
3. To serve information needed during the mission, e.g., by the flight crew.
4. To help analysts understand cases and find appropriate data.

It is not a data archive, but a guide to the data

Analysts should go to original data.

HIGHLY CONFIGURABLE AND FLEXIBLE

Typical Structure:

1. General information on the project
   (a) Links to important tools and references
   (b) Schedules, facilities, and plans

HIGHLY CONFIGURABLE AND FLEXIBLE

Typical Structure:

1. General information on the project
   (a) Links to important tools and references
   (b) Schedules, facilities, and plans
2. Operational products
   (a) satellite, radar
   (b) synoptic upper-air and surface maps

HIGHLY CONFIGURABLE AND FLEXIBLE

Typical Structure:

1. General information on the project
   (a) Links to important tools and references
   (b) Schedules, facilities, and plans
2. Operational products
   (a) satellite, radar
   (b) synoptic upper-air and surface maps
3. Forecast and model products

HIGHLY CONFIGURABLE AND FLEXIBLE

Typical Structure:

1. General information on the project
   (a) Links to important tools and references
   (b) Schedules, facilities, and plans
2. Operational products
   (a) satellite, radar
   (b) synoptic upper-air and surface maps
3. Forecast and model products
4. Research products and daily reports
   (a) plan-of-the-day, flight plans, instrument status
   (b) flight tracks, video/photos, mission reports and summaries

HIGHLY CONFIGURABLE AND FLEXIBLE

Typical Structure:

1. General information on the project
   (a) Links to important tools and references
   (b) Schedules, facilities, and plans
2. Operational products
   (a) satellite, radar
   (b) synoptic upper-air and surface maps
3. Forecast and model products
4. Research products and daily reports
   (a) plan-of-the-day, flight plans, instrument status
   (b) flight tracks, video/photos, mission reports and summaries
5. Links to in-field (preliminary) data
   (a) flight tracks; preliminary data plots
   (b) comments on instrument performance / QC

AN ILLUSTRATION: THE PREDICT CATALOG

- Products and structure will vary with needs of the project.
- PREDICT is a good recent example.
- Catalogs are intended to be permanent;
  All 67 produced to date, spanning 16 y, are still live.
- The PREDICT catalog can be found at this URL:
  `http://catalog.eol.ucar.edu/predict`

AN ILLUSTRATION: THE PREDICT CATALOG

- Products and structure will vary with needs of the project.
- PREDICT is a good recent example.
- Catalogs are intended to be permanent;
  All 67 produced to date, spanning 16 y, are still live.
- The PREDICT catalog can be found at this URL:
  `http://catalog.eol.ucar.edu/predict`

AN ILLUSTRATION: THE PREDICT CATALOG

- Products and structure will vary with needs of the project.
- PREDICT is a good recent example.
- Catalogs are intended to be permanent;
  All 67 produced to date, spanning 16 y, are still live.
- The PREDICT catalog can be found at this URL:
  `http://catalog.eol.ucar.edu/predict`

AN ILLUSTRATION: THE PREDICT CATALOG

- Products and structure will vary with needs of the project.
- PREDICT is a good recent example.
- Catalogs are intended to be permanent;
  All 67 produced to date, spanning 16 y, are still live.
- The PREDICT catalog can be found at this URL:
  `http://catalog.eol.ucar.edu/predict`

THE HOME PAGE

Pre-Depression Investigation of Cloud-systems in the Tropics

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links | Data Access | Help ?

Boulder, Colo: Sat, Jan 28, 2:22 AM UTC: Sat, Jan 28, 8:22 Z St Croix, USVI: Sat, Jan 28, 4:22 AM

Current Reports/Links:

Operations Plan of the Day

GV Status

Weather Discussion

GV flight plan

Resource Usage

X-Chat instant access

Help Documentation

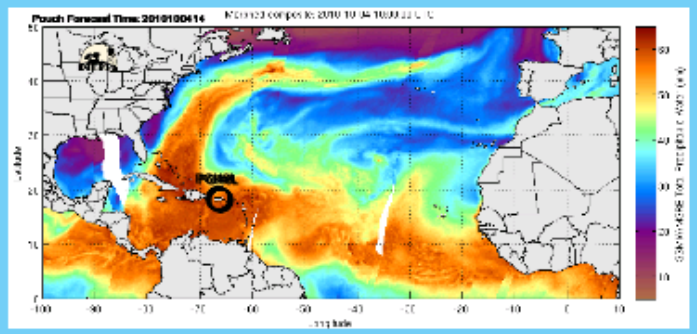
need passwd? : gstoss at ucar.edu

Catalog Earth

Mission Coordinator Display

PREDICT flight operations concluded on 30 September 2010

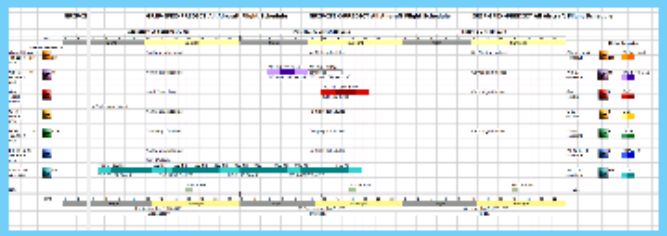
Latest Atlantic Basin



Additional Imagery:

Latest 4 hours G-13/M-9 Visible
Latest 4 hours G-13/M-9 IR

Upcoming Aircraft Schedule



General Information:

PREDICT Web Site

NHC Aircraft Reconnaissance Plan of the Day

NOAA/HRD Updates

NASA GRIP at JPL site

CIMSS PREDICT Page

NPS Wave-Pouch Page

PREDICT Domain

Comments

THE HOME PAGE

Buttons (for this project):

- Home
- Daily Reports
- Operational Products
- Model / Forecast Products
- Research Products
- Missions
- Tools and Links
- Data Access
- Help

THE HOME PAGE

Boulder, Colo: Sat, Jan 28, 2:22 AM **UTC:** Sat, Jan 28, 8:22 Z **St Croix, USVI:** Sat, Jan 28, 4:22 AM

Current Reports/Links:

Operations Plan of the Day

GV Status

Weather Discussion

GV flight plan

Resource Usage

X-Chat instant access

Help Documentation

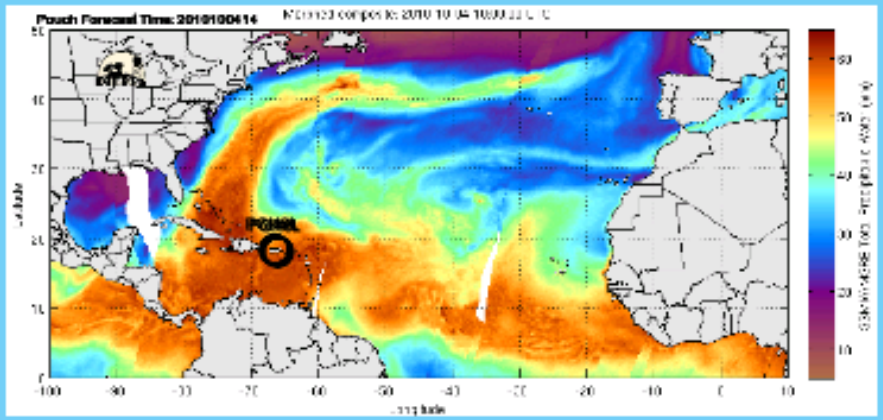
need passwd? : gstoss at ucar.edu

Catalog Earth

Mission Coordinator Display

PREDICT flight operations concluded on 30 September 2010

Latest Atlantic Basin



Additional Imagery:

Latest 4 hours G-13/M-9 Visible
Latest 4 hours G-13/M-9 IR

Upcoming Aircraft Schedule

General Information:

PREDICT Web Site

NHC Aircraft Reconnaissance Plan of the Day

NOAA/HRD Updates

NASA GRIP at JPL site

CIMSS PREDICT Page

NPS Wave-Pouch Page

PREDICT Domain

Comments

THE HOME PAGE

Pre-Depression Investigation of Cloud-systems in the Tropics

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links | Data Access | Help ?

Boulder, Colo: Thur, Jan 26, 5:52 PM UTC: Thur, Jan 26, 23:52 Z St Croix, USVI: Thur, Jan 26, 7:52 PM

Current Reports/Links:

Operations Plan of the Day

GV Status

Weather Discussion

GV flight plan

Resource Usage

X-Chat instant access

Help Documentation

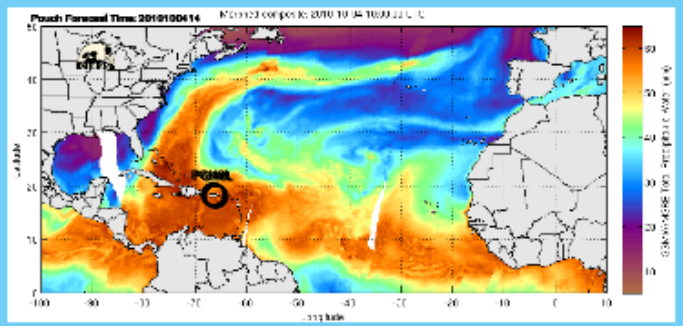
need passwd? : gstoss at ucar.edu

Catalog Earth

Mission Coordinator Display

PREDICT flight operations concluded on 30 September 2010

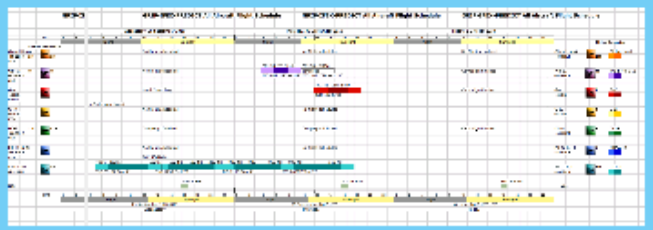
Latest Atlantic Basin



Additional Imagery:

Latest 4 hours G-13/M-9 Visible
Latest 4 hours G-13/M-9 IR

Upcoming Aircraft Schedule



General Information:

PREDICT Web Site

NHC Aircraft Reconnaissance Plan of the Day

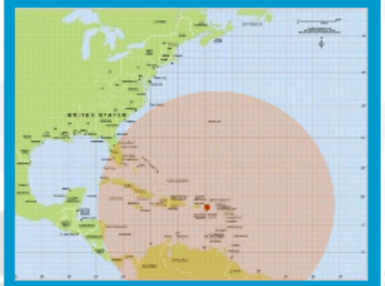
NOAA/HRD Updates

NASA GRIP at JPL site

CIMSS PREDICT Page

NPS Wave-Pouch Page

PREDICT Domain



Comments

THE HOME PAGE

Current Reports/Links

- Daily Operations Plan
- Status of Equipment
- Weather briefing

THE HOME PAGE

Current Reports/Links:

Operations Plan of the Day

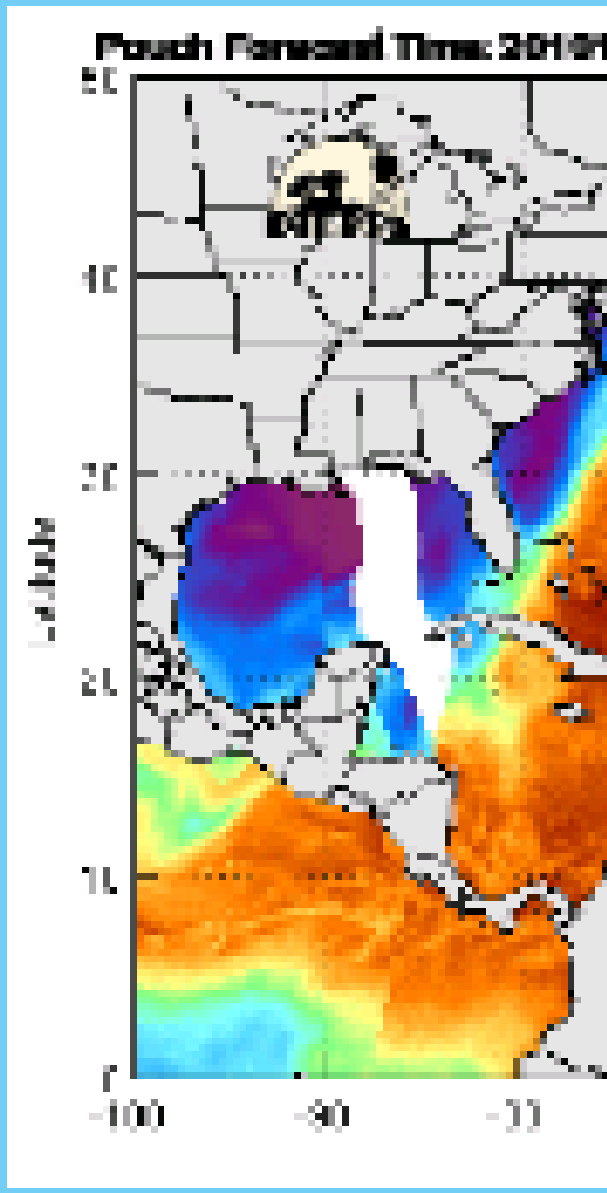
GV Status

Weather Discussion

GV flight plan

Resource Usage

X-Chat instant access



THE HOME PAGE

Access to Tools

- XChat access
- Documentation on Usage

THE HOME PAGE

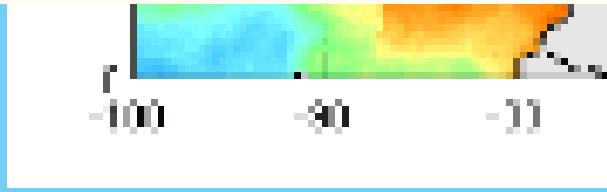
X-Chat instant access

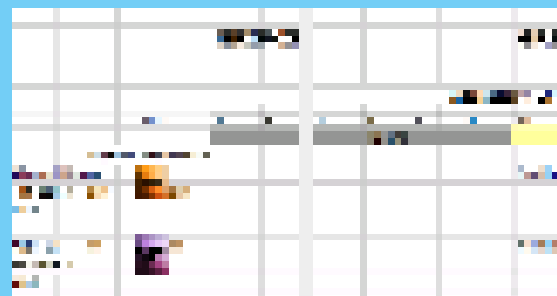
Help Documentation

need passwd? :
gstoss at ucar.edu

Catalog Earth

Mission Coordinator





THE HOME PAGE

Pre-Depression Investigation of Cloud-systems in the Tropics

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links | Data Access | Help ?

Boulder, Colo: Thur, Jan 26, 5:52 PM UTC: Thur, Jan 26, 23:52 Z St Croix, USVI: Thur, Jan 26, 7:52 PM

Current Reports/Links:

Operations Plan of the Day
GV Status
Weather Discussion
GV flight plan
Resource Usage

X-Chat instant access

Help Documentation

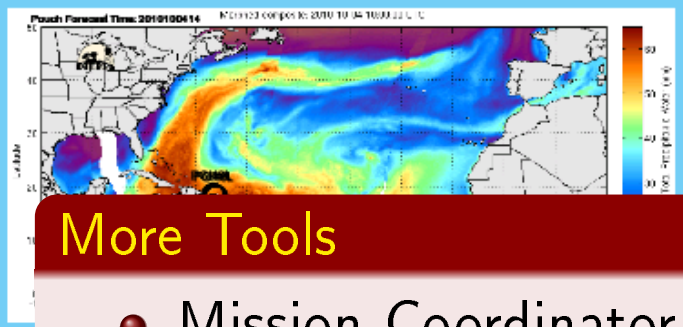
need passwd? : gstoss at ucar.edu

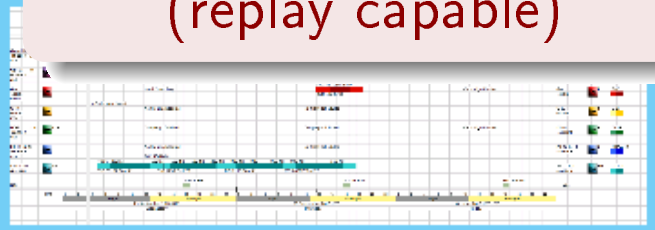
Catalog Earth

Mission Coordinator Display

PREDICT flight operations concluded on 30 September 2010

Latest Atlantic Basin





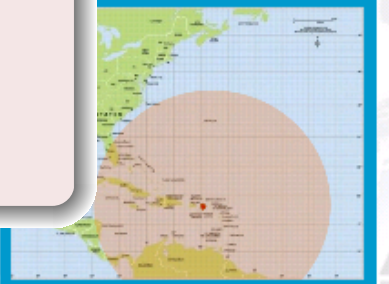
More Tools

- Mission Coordinator Display (real time)
- Catalog Earth (replay capable)

General Information:

PREDICT Web Site
NHC Aircraft Reconnaissance Plan of the Day
NOAA/HRD Updates
NASA GRIP at JPL site
CIMSS PREDICT Page
PS Wave-Pouch Page

PREDICT Domain



Comments

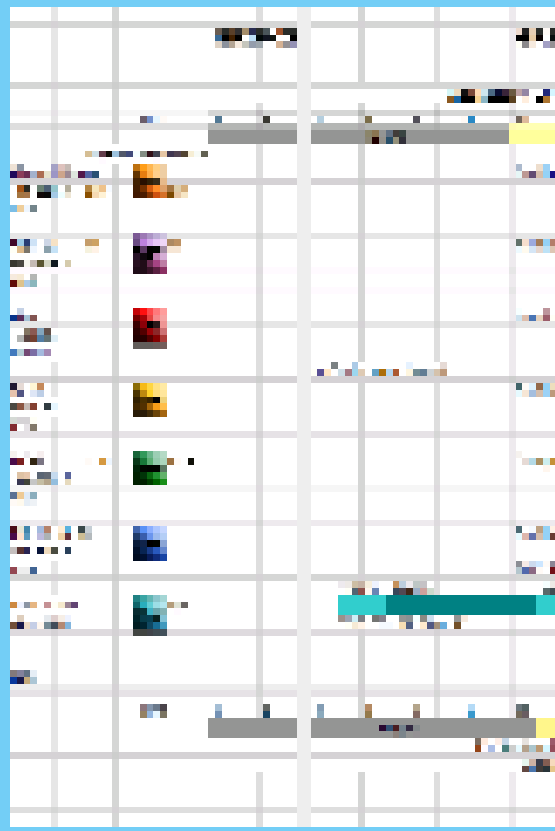
THE HOME PAGE

gstoss at ucar.edu

Catalog Earth

Mission Coordinator Display

PREDICT flight operations concluded on 30 September 2010



THE HOME PAGE

Pre-Depression Investigation of Cloud-systems in the Tropics

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links | Data Access | Help ?

Boulder, Colo: Thur, Jan 26, 5:52 PM UTC: Thur, Jan 26, 23:52 Z St Croix, USVI: Thur, Jan 26, 7:52 PM

Current Reports/Links:

Operations Plan of the Day

GV Status

Weather Discussion

GV flight plan

Resource Usage

X-Chat instant access

Help Documentation

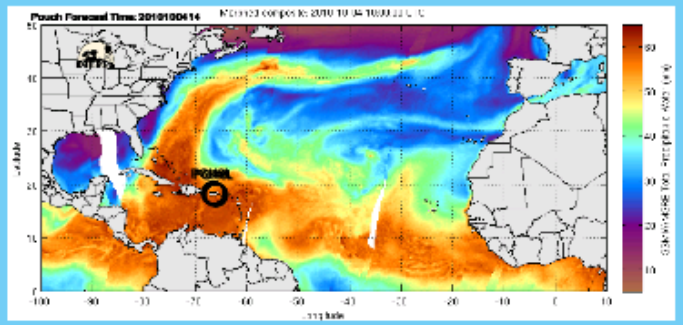
need passwd? : gstoss at ucar.edu

Catalog Earth

Mission Coordinator Display

PREDICT flight operations concluded on 30 September 2010

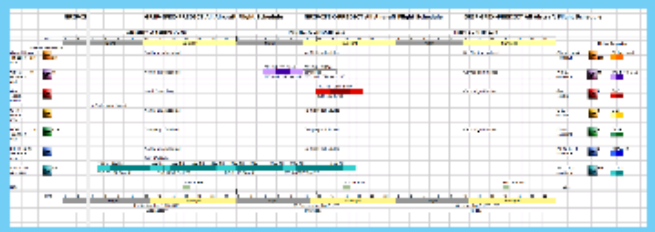
Latest Atlantic Basin



Additional Imagery:

Latest 4 hours G-13/M-9 Visible
Latest 4 hours G-13/M-9 IR

Upcoming Aircraft Schedule



General Information:

PREDICT Web Site

NHC Aircraft Reconnaissance Plan of the Day

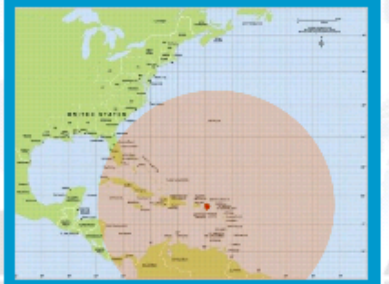
NOAA/HRD Updates

NASA GRIP at JPL site

CIMSS PREDICT Page

NPS Wave-Pouch Page

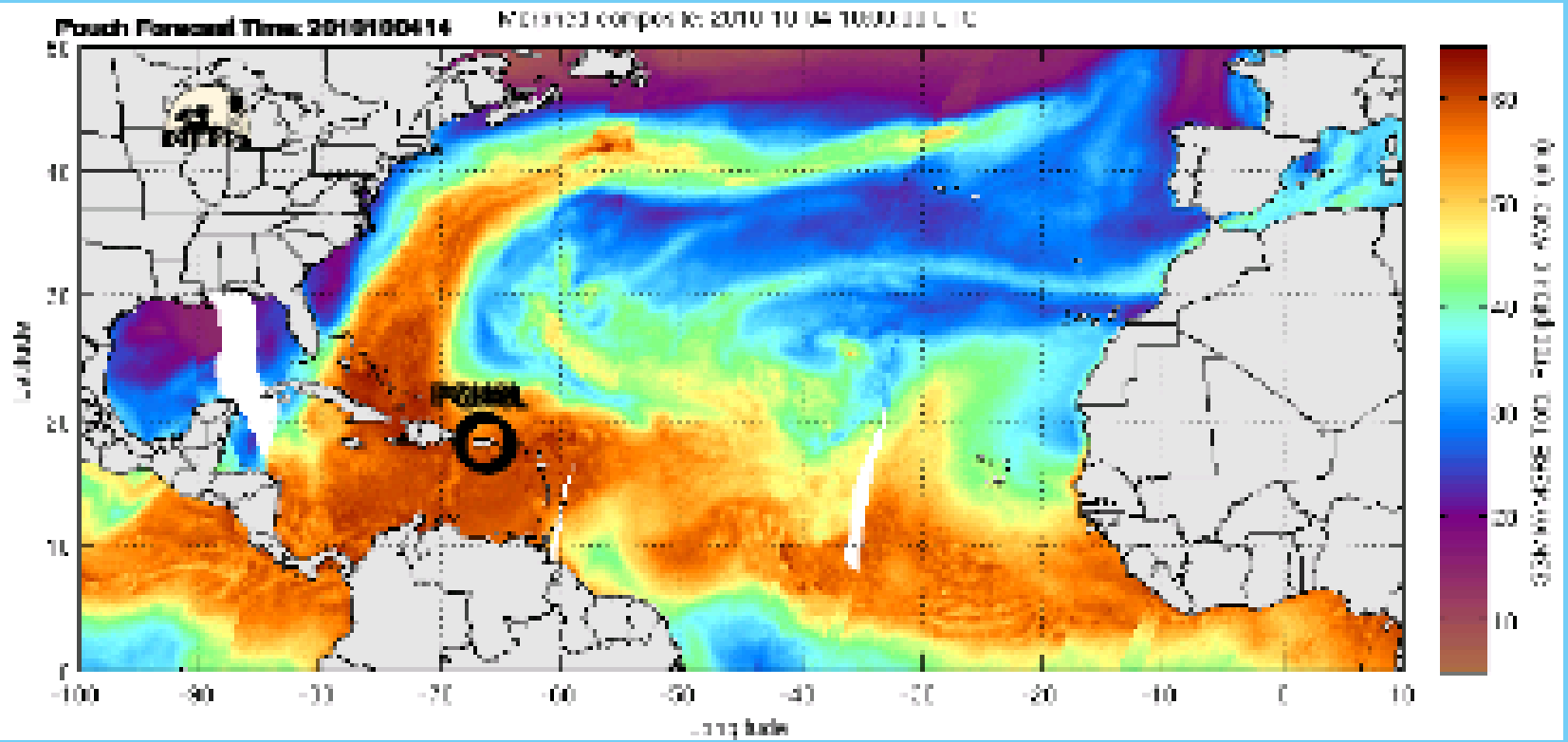
PREDICT Domain



Comments

THE HOME PAGE

Latest Atlantic Basin



Additional Imagery:

Latest 4 hours G-13/M-9 Visible
Latest 4 hours G-13/M-9 IR

THE HOME PAGE

Pre-Depression Investigation of Cloud-systems in the Tropics

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links | Data Access | Help ?

Boulder, Colo: Thur, Jan 26, 5:52 PM UTC: Thur, Jan 26, 23:52 Z St Croix, USVI: Thur, Jan 26, 7:52 PM

Current Reports/Links:

Operations Plan of the Day

GV Status

Weather Discussion

GV flight plan

Resource Usage

X-Chat instant ac

Help Documenta

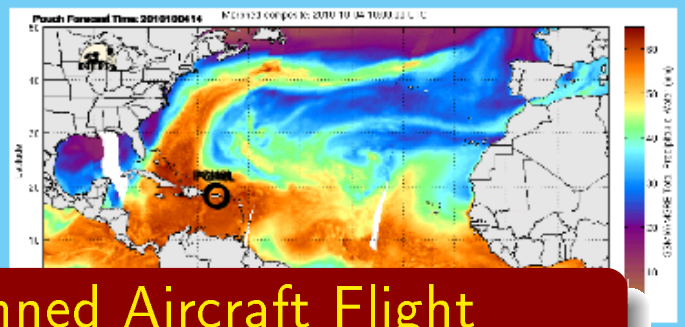
need passwd? gstoss at ucar.edu

Catalog Earth

Mission Coordinator Display

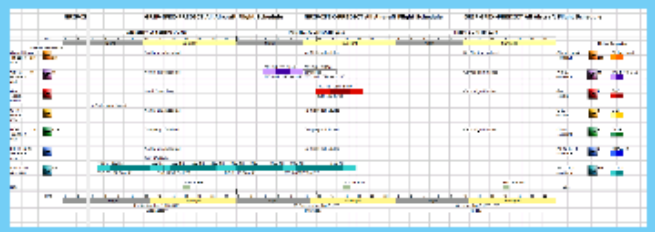
PREDICT flight operations concluded on 30 September 2010

Latest Atlantic Basin



Planned Aircraft Flight Times

Upcoming Aircraft Schedule



General Information:

PREDICT Web Site

NHC Aircraft Reconnaissance Plan of the Day

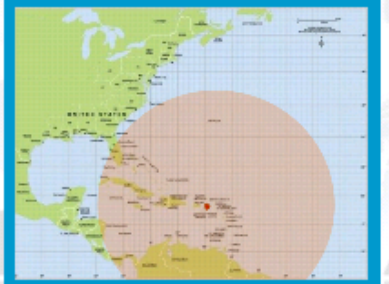
NOAA/HRD Updates

NASA GRIP at JPL site

CIMSS PREDICT Page

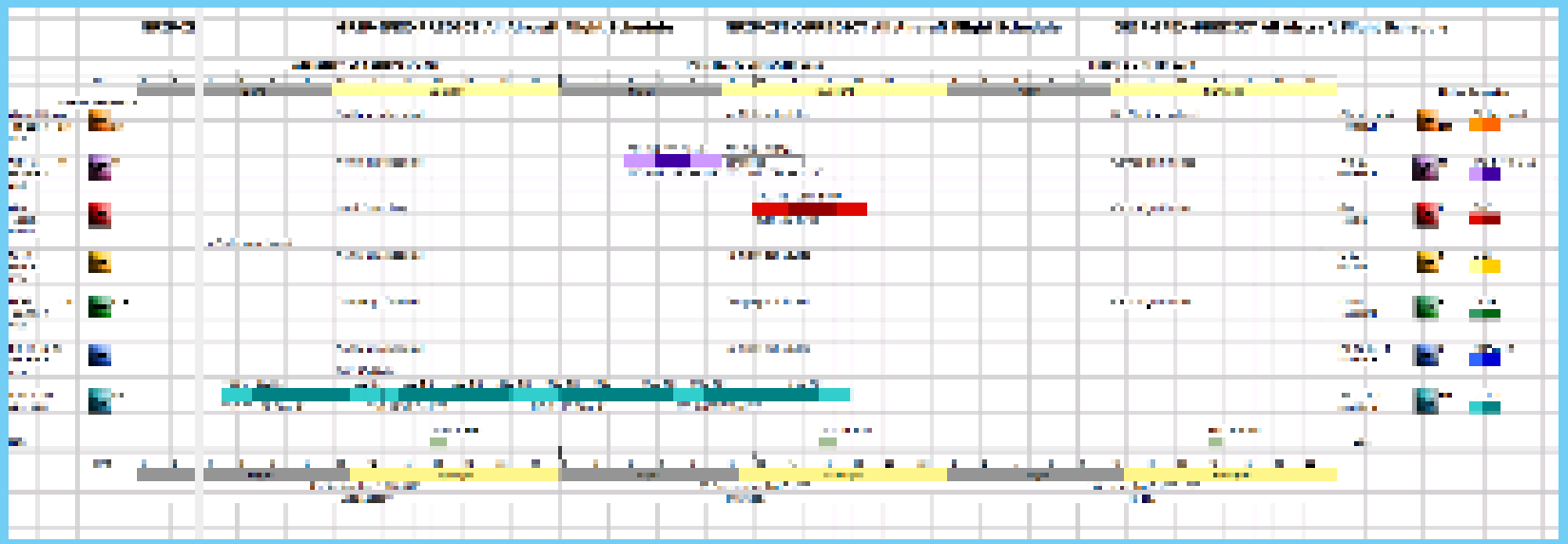
NPS Wave-Pouch Page

PREDICT Domain



Comments

THE HOME PAGE



THE HOME PAGE

THE HOME PAGE

x, USVI: Thur, Jan 26, 7:52 PM

General Information:

PREDICT Web Site

NHC Aircraft Reconnaissance Plan of the Day

NOAA/HRD Updates

NASA GRIP at JPL site

CIMSS PREDICT Page

NPS Wave-Pouch Page

THE HOME PAGE

Pre-Depression Investigation of Cloud-systems in the Tropics

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links | Data Access | Help ?

Boulder, Colo: Thur, Jan 26, 5:52 PM UTC: Thur, Jan 26, 23:52 Z St Croix, USVI: Thur, Jan 26, 7:52 PM

Current Reports/Links:

Operations Plan of the Day

GV Status

Weather Discussion

GV flight plan

Resource Usage

X-Chat instant access

Help Documenta

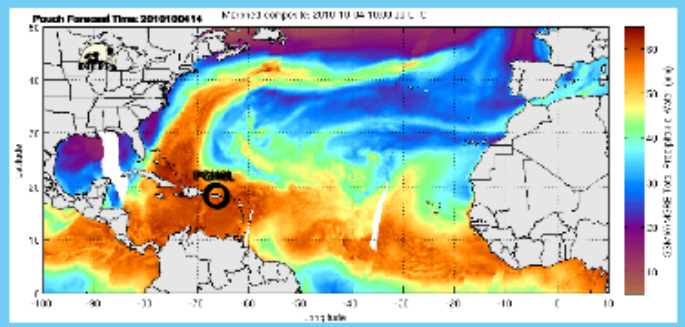
need passwd?
gstoss at ucar.ed

Catalog Earth

Mission Coordinator Display

PREDICT flight operations concluded on 30 September 2010

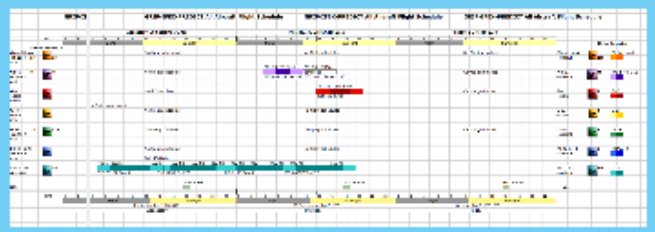
Latest Atlantic Basin



Additional Imagery

Map of Operations Area

Upcoming Aircraft Schedule



General Information:

PREDICT Web Site

NHC Aircraft Reconnaissance Plan of the Day

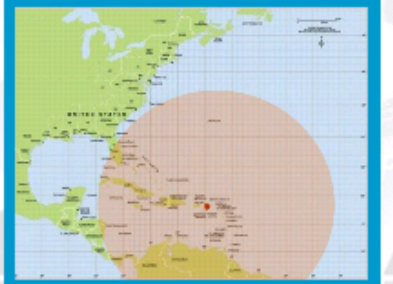
NOAA/HRD Updates

NASA GRIP at JPL site

CIMSS PREDICT Page

NPS Wave-Pouch Page

PREDICT Domain



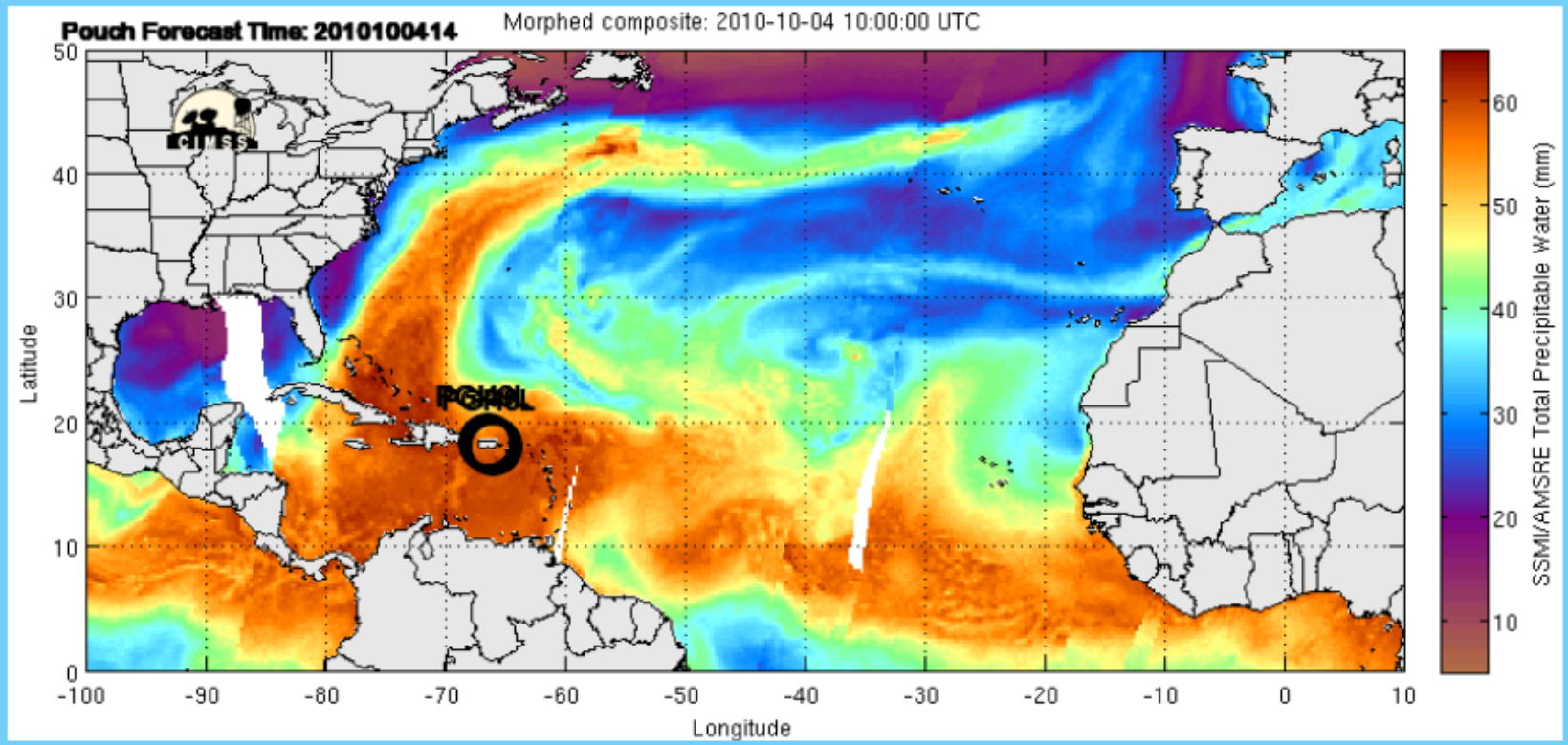
Comments

THE HOME PAGE

PREDICT Domain

THE HOME PAGE

Latest Atlantic Basin

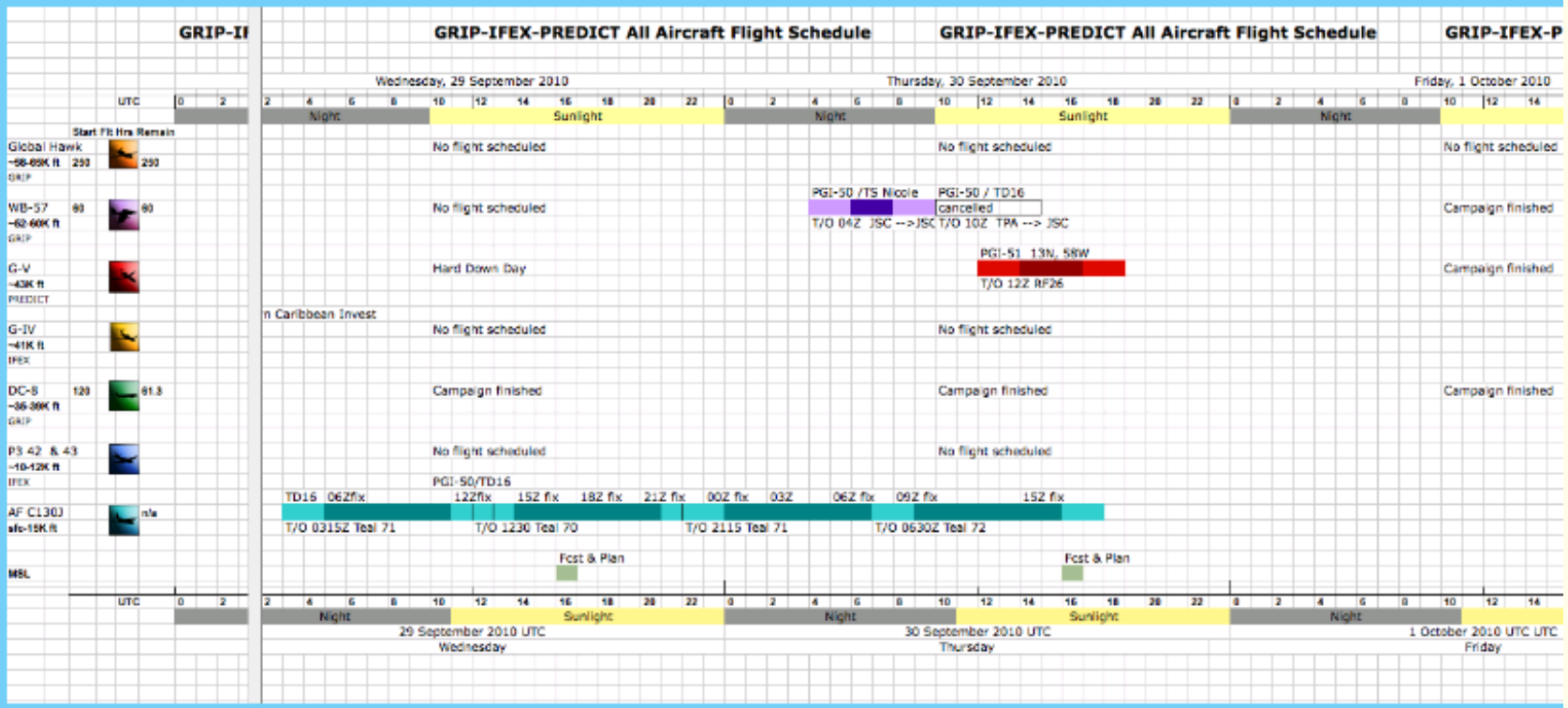


Additional Imagery:

Latest 4 hours G-13/M-9 Visible
Latest 4 hours G-13/M-9 IR

THE HOME PAGE

Upcoming Aircraft Schedule



OPERATIONAL PRODUCTS

Stored By Date / Time

Browse by Date:

UTC CST

June 2010						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July 2010						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August 2010						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September 2010						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Browse by Operational Products:

Analysis Products

MTM_PGI_Analysis — 650_mb_Africa_Analysis | Latest | Start Date | End Date | retrieve products

Satellite Products

NRL_Tropics — 01L_ALEX_AMSRE_36h | Latest | Start Date | End Date | retrieve products

GOES-13_METEOSAT-9 — composite_thermal-IR | Latest | Start Date | End Date | retrieve products

OPERATIONAL PRODUCTS

Moving Down Page:

goes-13 | MC_Display_ch4_thermal-IR | Latest | Start Date | End Date | retrieve products

Hovmoller | Africa_Meteosat-9 | Latest | Start Date | End Date | retrieve products

meteosat9 | PGI21L_VIS_SWIR | Latest | Start Date | End Date | retrieve products

Radar Products

Radar | Altamira_MX | Latest | Start Date | End Date | retrieve products

NEXRAD | San_Juan | Latest | Start Date | End Date | retrieve products

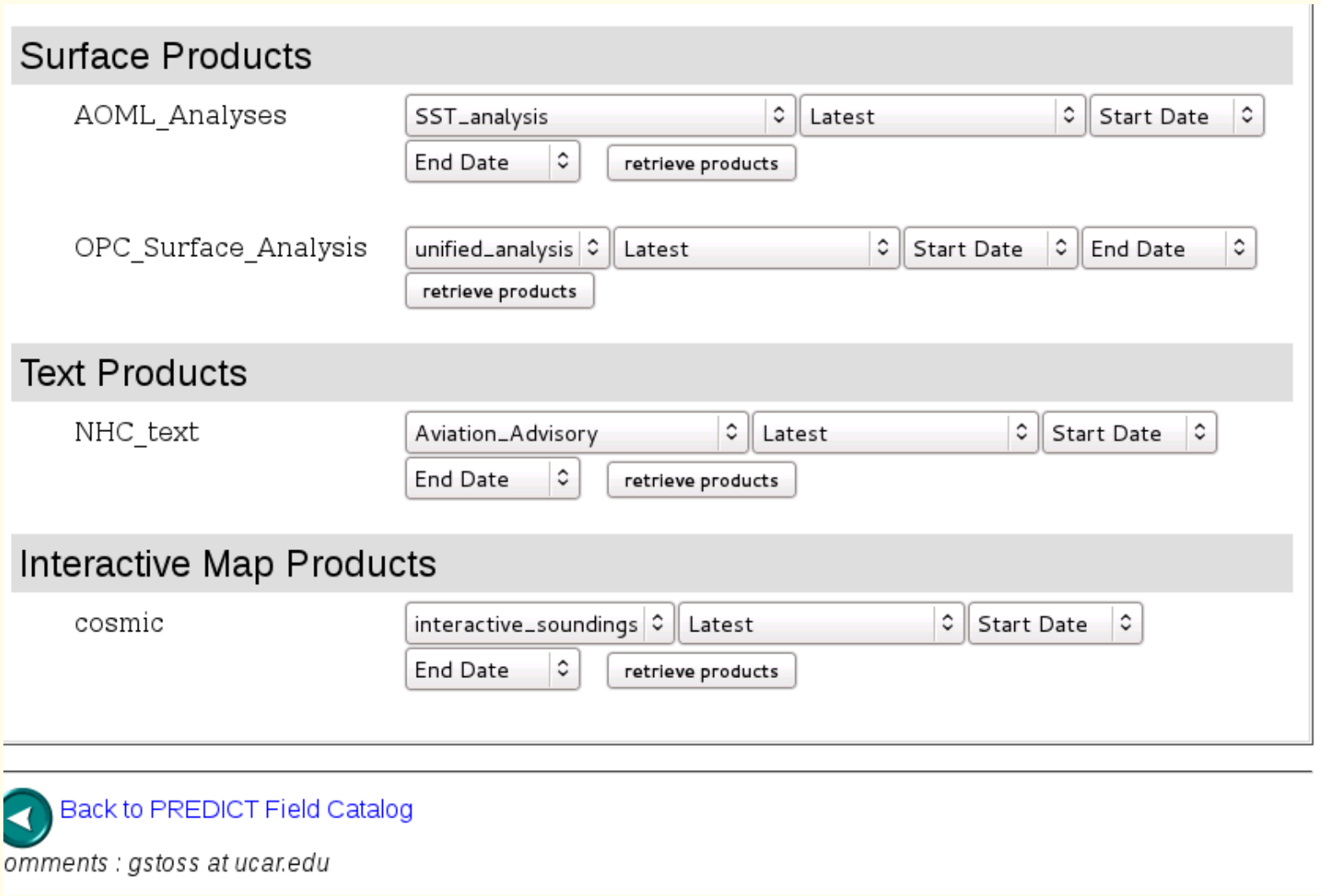
Upper Air Products

Time_Height | Belize_Actual_Wind | Latest | Start Date | End Date | retrieve products

Skewt | Belize | Latest | Start Date

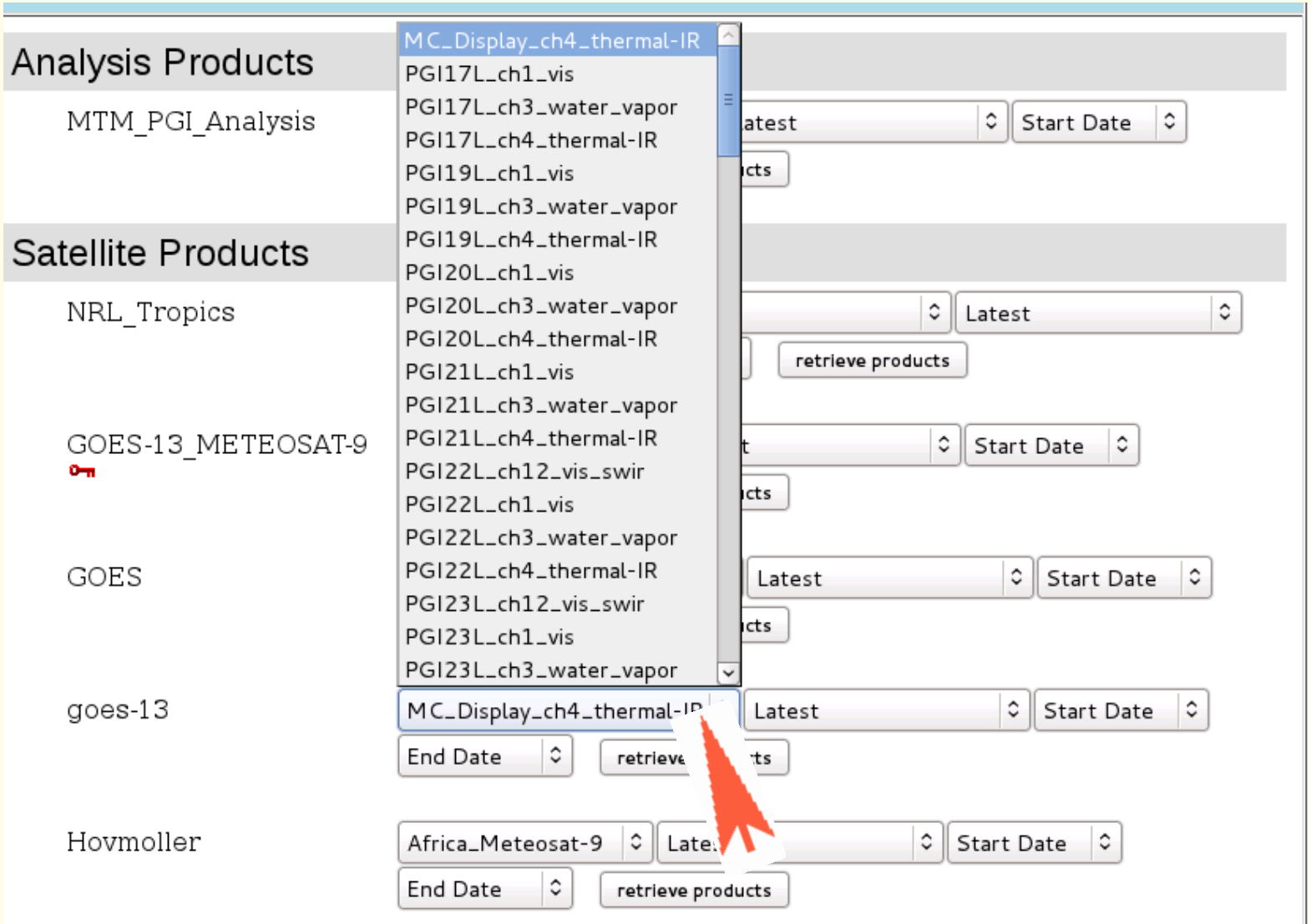
OPERATIONAL PRODUCTS

Includes Satellite, Upper Air, Surface, etc.

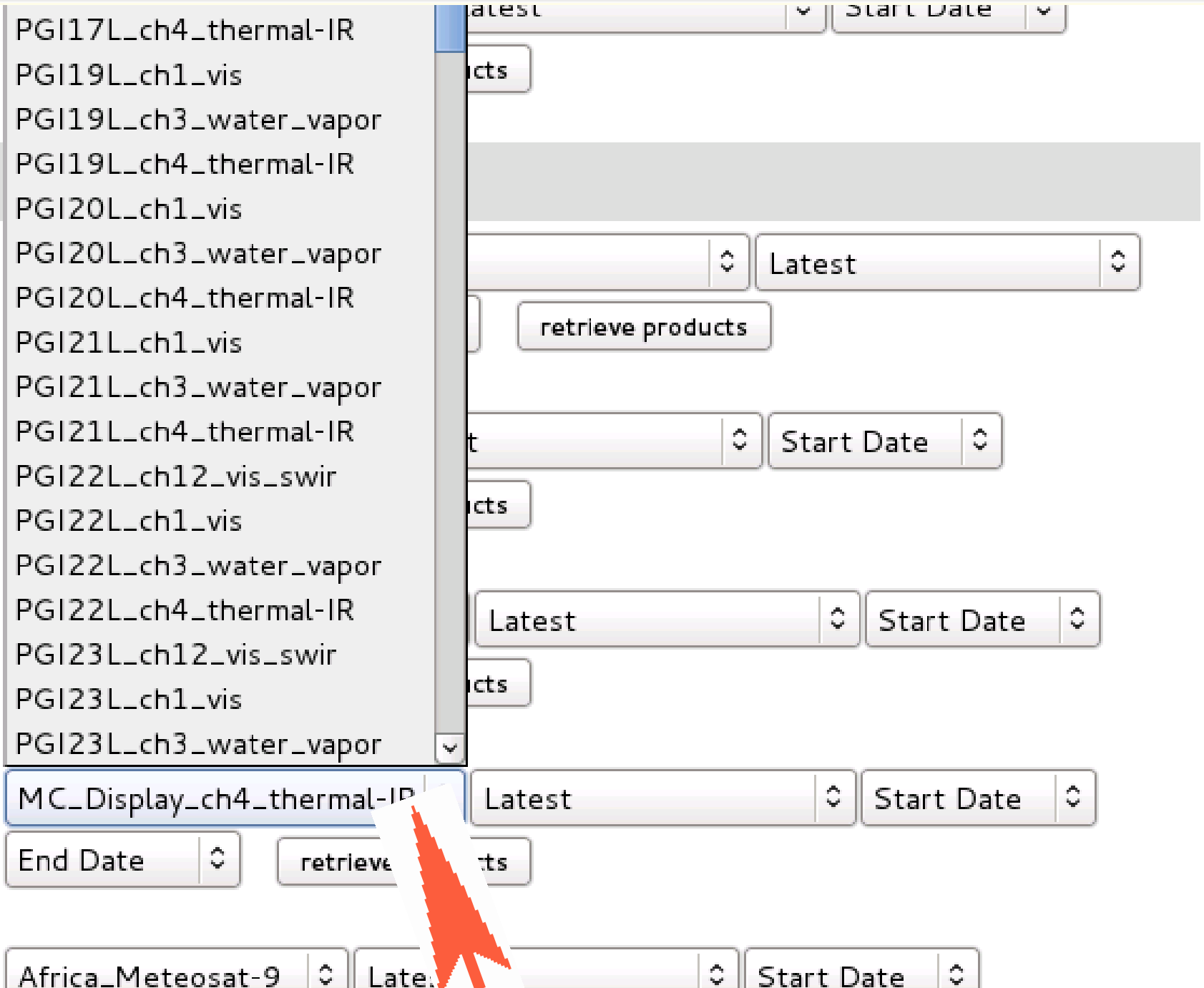


OPERATIONAL PRODUCTS

Under GOES-13, many channels:



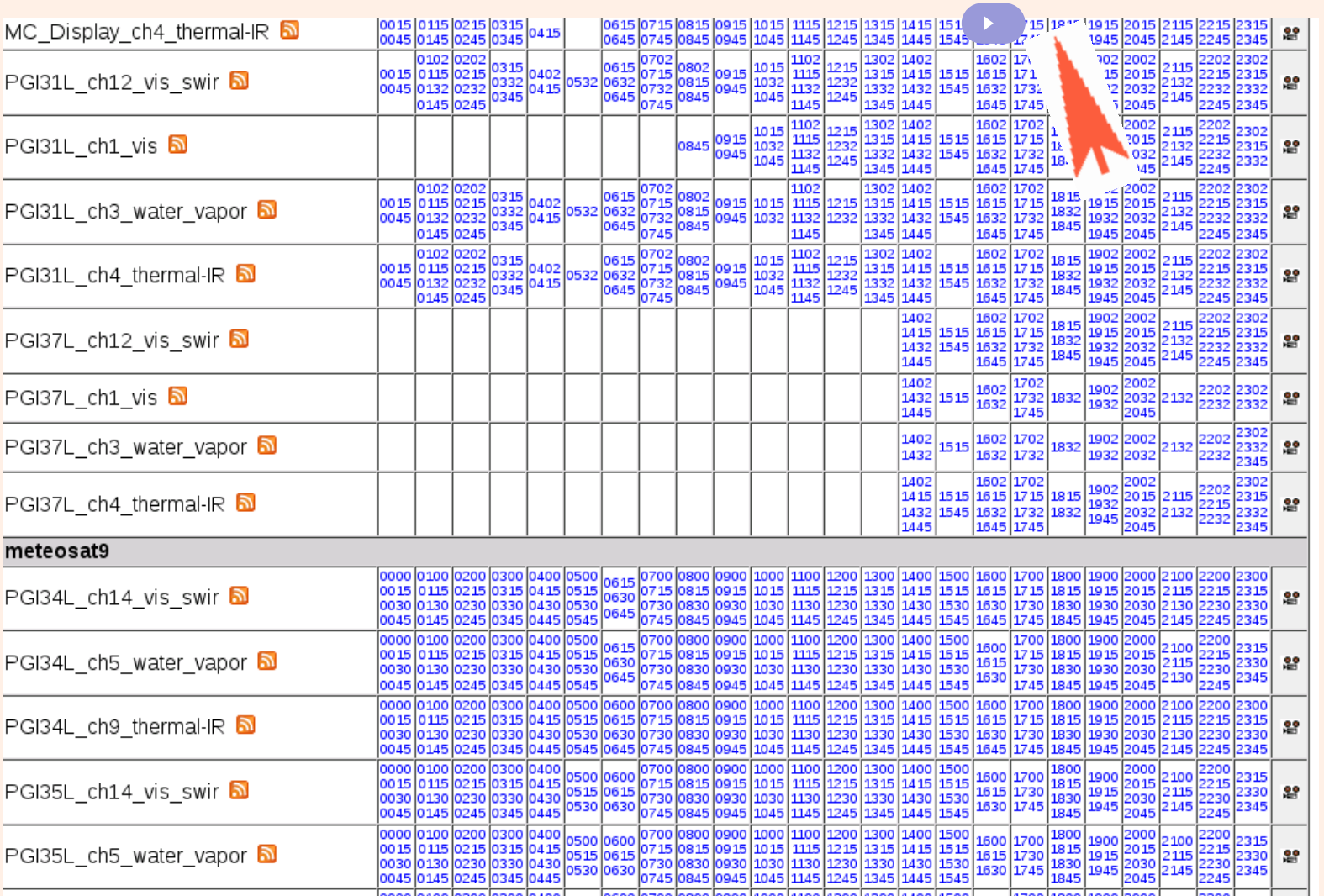
OPERATIONAL PRODUCTS



OPERATIONAL PRODUCTS

Click on date; display then shows individual products

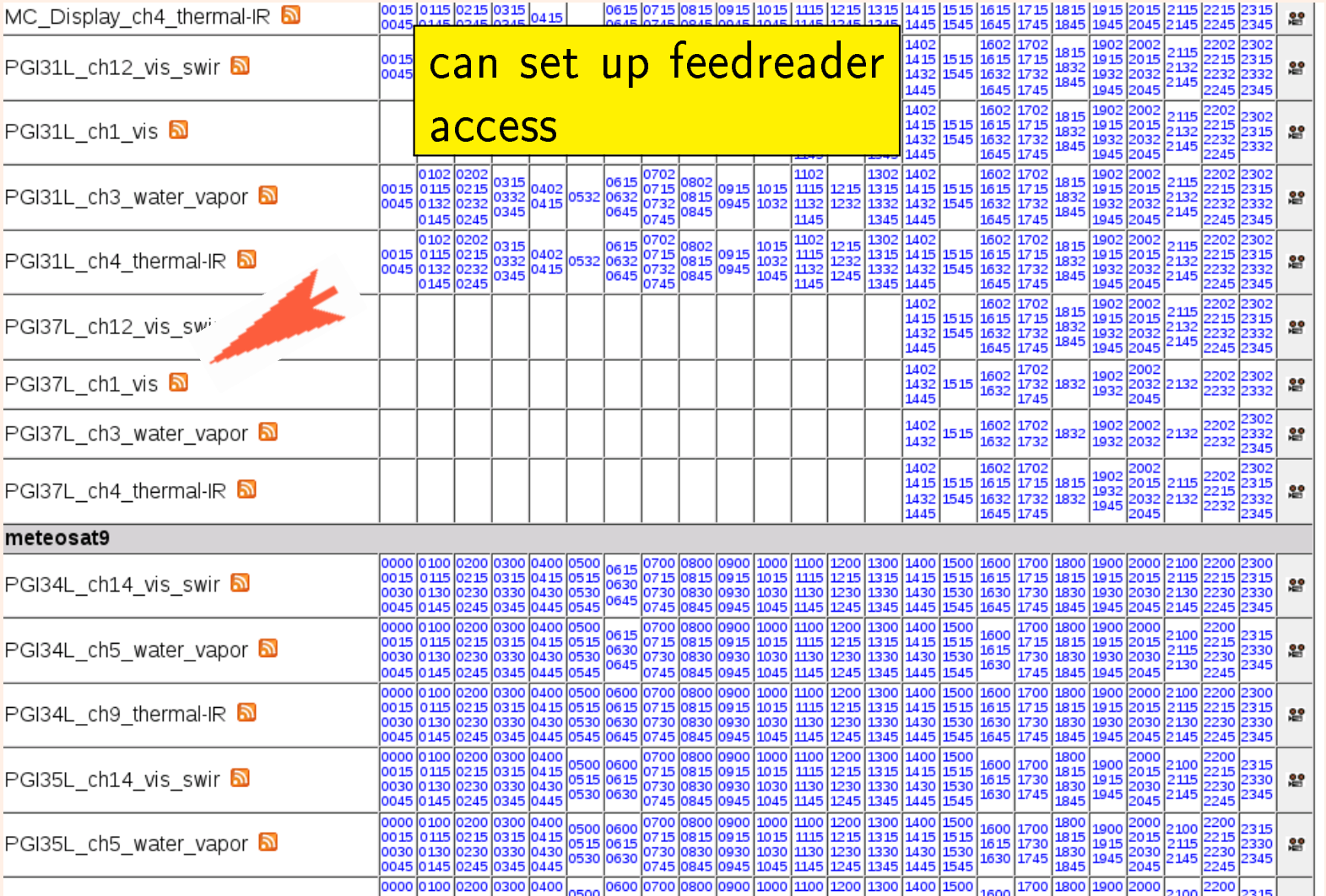
Then click on time to see image



OPERATIONAL PRODUCTS

Click on date; display then shows individual products

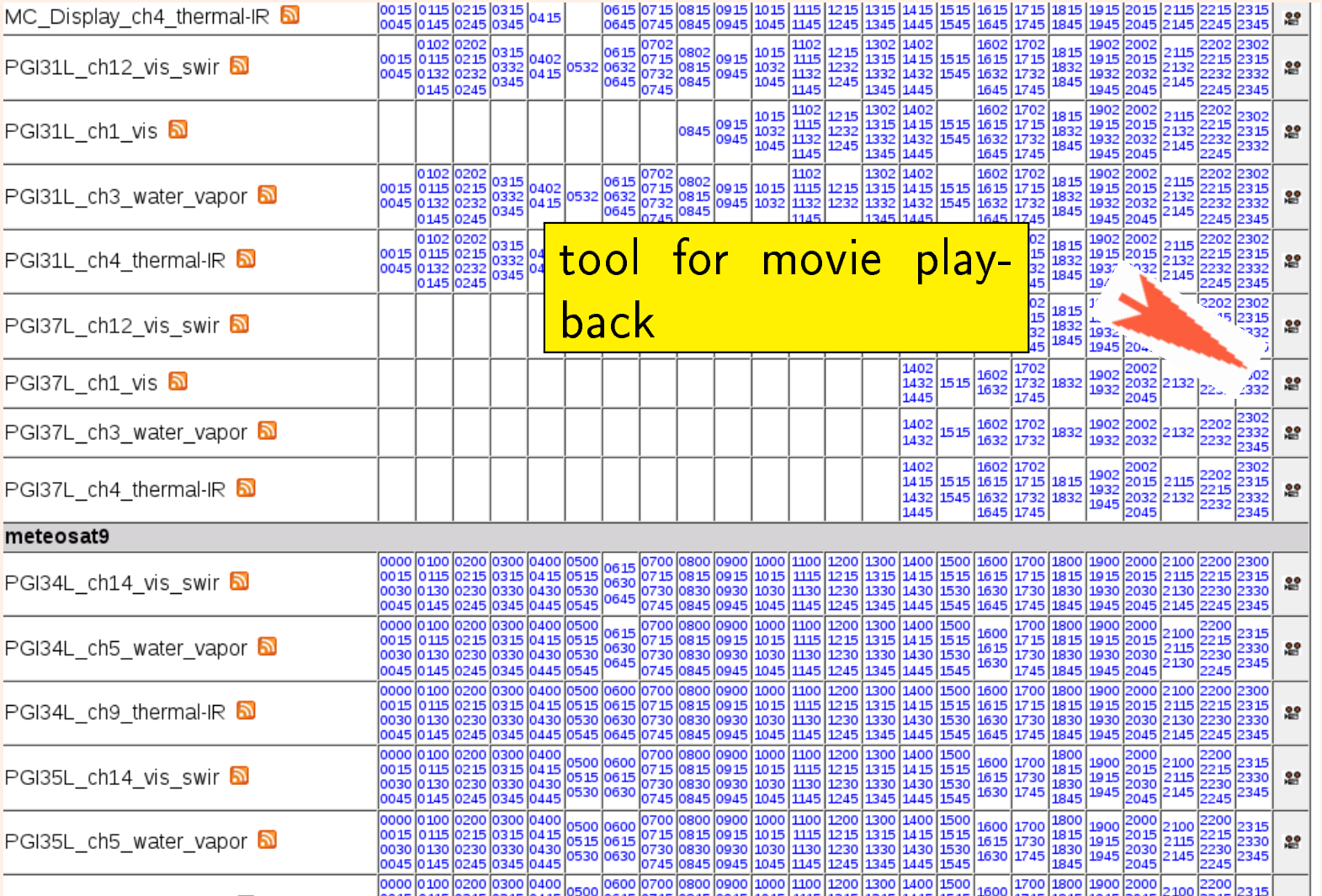
Then click on time to see image



OPERATIONAL PRODUCTS

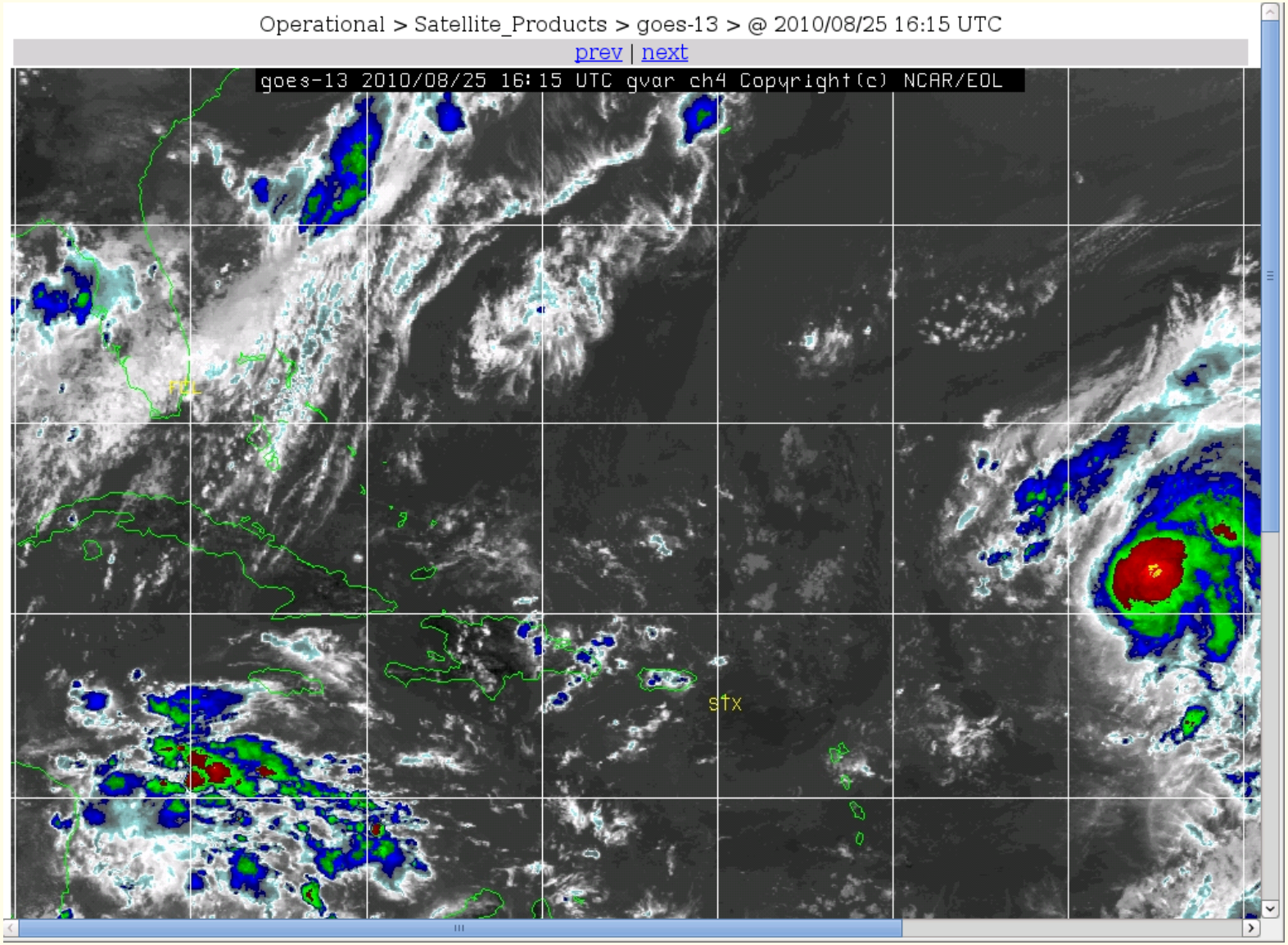
Click on date; display then shows individual products

Then click on time to see image



OPERATIONAL PRODUCTS

Example: GOES IR



OPERATIONAL PRODUCTS

Radar and Sounding Examples

Radar Products

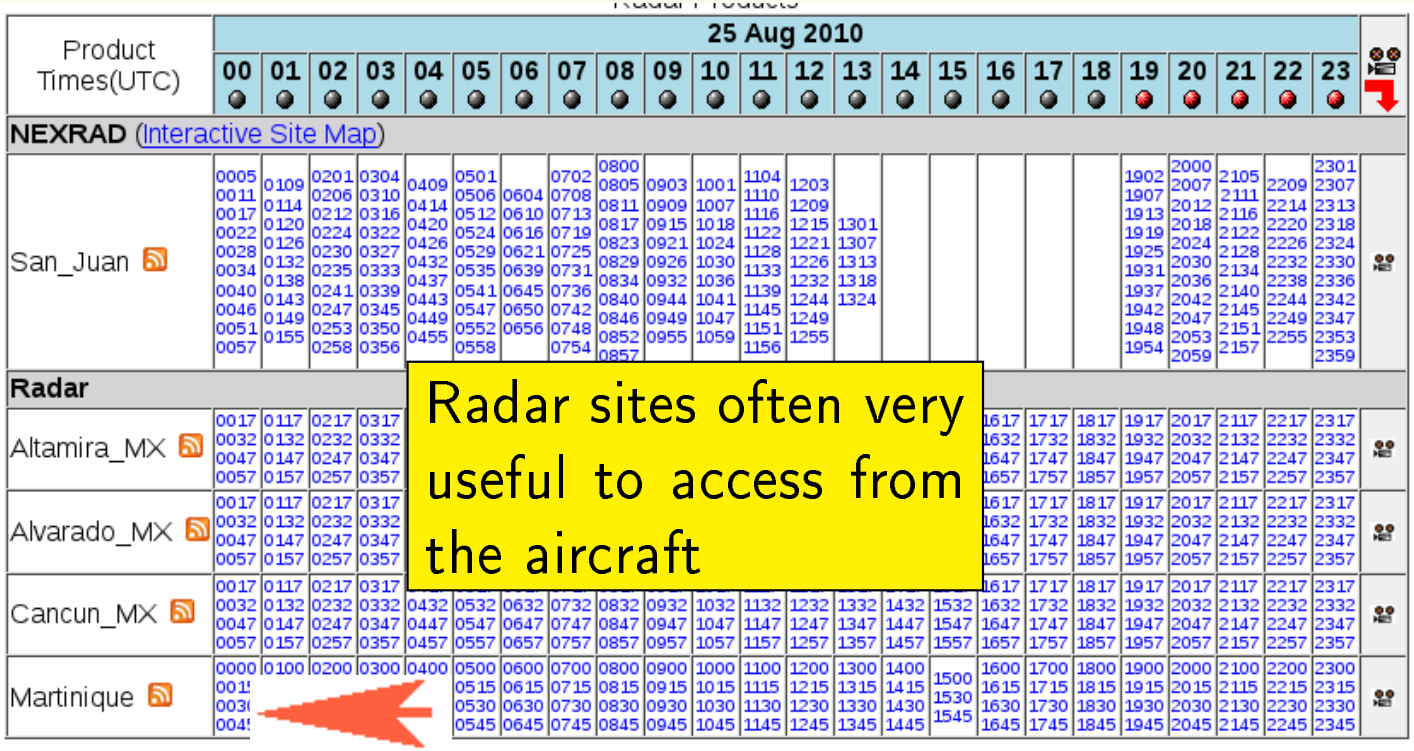
Product Times(UTC)	25 Aug 2010																							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
NEXRAD (Interactive Site Map)																								
San_Juan	0005 0011 0017 0022 0028 0034 0040 0046 0051 0057	0109 0114 0120 0126 0132 0138 0143 0149 0155	0201 0206 0212 0224 0230 0235 0241 0247 0253 0258	0304 0310 0316 0322 0327 0333 0339 0345 0350 0356	0409 0414 0420 0426 0432 0437 0443 0449 0455	0501 0506 0512 0524 0529 0535 0541 0547 0552 0558	0604 0610 0616 0621 0639 0645 0650 0656	0702 0708 0713 0719 0725 0731 0736 0742 0748 0754	0800 0805 0811 0817 0823 0829 0834 0840 0846 0852 0857	0903 0909 0915 0921 0926 0932 0944 0949 0955	1001 1007 1018 1024 1030 1036 1041 1047 1059	1104 1110 1116 1122 1128 1133 1139 1145 1151 1156	1203 1209 1215 1221 1226 1232 1244 1249 1255	1301 1307 1313 1318 1324						1902 1907 1913 1919 1925 1931 1937 1942 1948 1954	2000 2007 2012 2018 2024 2030 2036 2042 2047 2053 2059	2105 2111 2116 2122 2128 2134 2140 2145 2151 2157	2209 2214 2220 2226 2232 2238 2244 2249 2255	2301 2307 2313 2318 2324 2330 2336 2342 2347 2353 2359
Radar																								
Altamira_MX	0017 0032 0047 0057	0117 0132 0147 0157	0217 0232 0247 0257	0317 0332 0347 0357	0417 0432 0447 0457	0517 0532 0547 0557	0617 0632 0647 0657	0717 0732 0747 0757	0817 0832 0847 0857	0917 0932 0947 0957	1017 1032 1047 1057	1117 1132 1147 1157	1217 1232 1247 1257	1317 1332 1347 1357	1417 1432 1447 1457	1517 1532 1547 1557	1617 1632 1647 1657	1717 1732 1747 1757	1817 1832 1847 1857	1917 1932 1947 1957	2017 2032 2047 2057	2117 2132 2147 2157	2217 2232 2247 2257	2317 2332 2347 2357
Alvarado_MX	0017 0032 0047 0057	0117 0132 0147 0157	0217 0232 0247 0257	0317 0332 0347 0357	0417 0432 0447 0457	0517 0532 0547 0557	0617 0632 0647 0657	0717 0732 0747 0757	0817 0832 0847 0857	0917 0932 0947 0957	1017 1032 1047 1057	1117 1132 1147 1157	1217 1232 1247 1257	1317 1332 1347 1357	1417 1432 1447 1457	1517 1532 1547 1557	1617 1632 1647 1657	1717 1732 1747 1757	1817 1832 1847 1857	1917 1932 1947 1957	2017 2032 2047 2057	2117 2132 2147 2157	2217 2232 2247 2257	2317 2332 2347 2357
Cancun_MX	0017 0032 0047 0057	0117 0132 0147 0157	0217 0232 0247 0257	0317 0332 0347 0357	0417 0432 0447 0457	0517 0532 0547 0557	0617 0632 0647 0657	0717 0732 0747 0757	0817 0832 0847 0857	0917 0932 0947 0957	1017 1032 1047 1057	1117 1132 1147 1157	1217 1232 1247 1257	1317 1332 1347 1357	1417 1432 1447 1457	1517 1532 1547 1557	1617 1632 1647 1657	1717 1732 1747 1757	1817 1832 1847 1857	1917 1932 1947 1957	2017 2032 2047 2057	2117 2132 2147 2157	2217 2232 2247 2257	2317 2332 2347 2357
Martinique	0000 0015 0030 0045	0100 0115 0130 0145	0200 0215 0230 0245	0300 0315 0330 0345	0400 0415 0430 0445	0500 0515 0530 0545	0600 0615 0630 0645	0700 0715 0730 0745	0800 0815 0830 0845	0900 0915 0930 0945	1000 1015 1030 1045	1100 1115 1130 1145	1200 1215 1230 1245	1300 1315 1330 1345	1400 1415 1430 1445	1500 1530 1545	1600 1615 1630 1645	1700 1715 1730 1745	1800 1815 1830 1845	1900 1915 1930 1945	2000 2015 2030 2045	2100 2115 2130 2145	2200 2215 2230 2245	2300 2315 2330 2345

Upper Air Products

Product Times(UTC)	25 Aug 2010	
	00	12
Skewt (Interactive Site Map)		
Belize	0000	1200
Cayenne_French_Guiana	0000	1200
Curacao_Netherland_Antilles	0000	1200
Dakar		1200
Grantley_Adams_Barbados		1200
La_Raizet_Guadeloupe	0000	1200
Nassau		1200

OPERATIONAL PRODUCTS

Radar and Sounding Examples



Radar sites often very useful to access from the aircraft

Upper Air Products

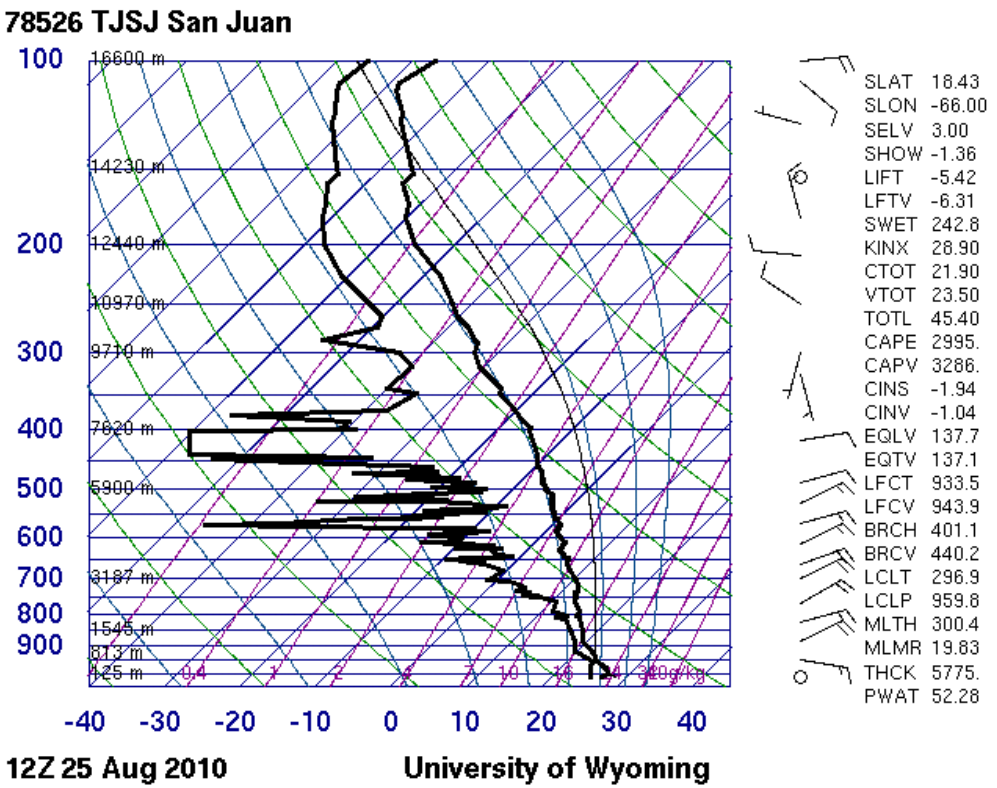
Product Times(UTC)	25 Aug 2010 00	25 Aug 2010 12
Skewt (Interactive Site Map)		
Belize	0000	1200

OPERATIONAL PRODUCTS

Available in Skew-T plots

Operational > Upper_Air_Products > Skewt > @ 2010/08/25 12:00 UTC
(Interactive Site Map)

prev | next



prev | next

Sample HTML to link to this image:

ops.Skewt.201008251200.San_Juan.gif

---

delete

comments : gstoss at ucar.edu

FORECAST AND MODEL PRODUCTS

Model Products:

- SHIPS Intensity
- NCEP EMC Track
- Marsupial Pouch
- NCAR WRF ARW
- NHC Composite Tracks
- CIRA RAMMB TC Formation Probability
- CMC
- GFDL
- Global Ensemble (NCEP, EMCWF)
- NRL NOGAPS
- NCEP GFS
- NCEP NAM

FORECAST AND MODEL PRODUCTS

Model Products:

- SHIPS Intensity
- NCEP EMC Track
- Marsupial Pouch
- NCAR WRF ARW
- NHC Composite Tracks
- CIRA RAMMB TC Formation Probability
- CMC
- GFDL
- Global Ensemble (NCEP, EMCWF)
- NRL NOGAPS
- NCEP GFS
- NCEP NAM

Similar Tools for Feedreader and Movies

Easy access: Select times and click symbol,

FORECAST AND MODEL PRODUCTS

Example For A Specific Date

Available Model Products for 2010/08/25 UTC

Previous Date(UTC) | Choose Date(UTC) | Next Date(UTC)

SHIPS Intensity Forecast Products

Forecast Times(UTC)	25 Aug 2010				
	00	06	12	18	
TPC_SHIPS - Analysis and Forecast from 2010/08/25 00:00 UTC					
AL06_Intensity_Forecast	000hr				
AL96_Intensity_Forecast	000hr				
TPC_SHIPS - Analysis and Forecast from 2010/08/25 06:00 UTC					
AL06_Intensity_Forecast		000hr			
AL96_Intensity_Forecast		000hr			
TPC_SHIPS - Analysis and Forecast from 2010/08/25 12:00 UTC					
AL06_Intensity_Forecast			000hr		
AL07_Intensity_Forecast			000hr		
TPC_SHIPS - Analysis and Forecast from 2010/08/25 18:00 UTC					
AL06_Intensity_Forecast				000hr	
AL07_Intensity_Forecast				000hr	

NCEP EMC Track Forecast Products

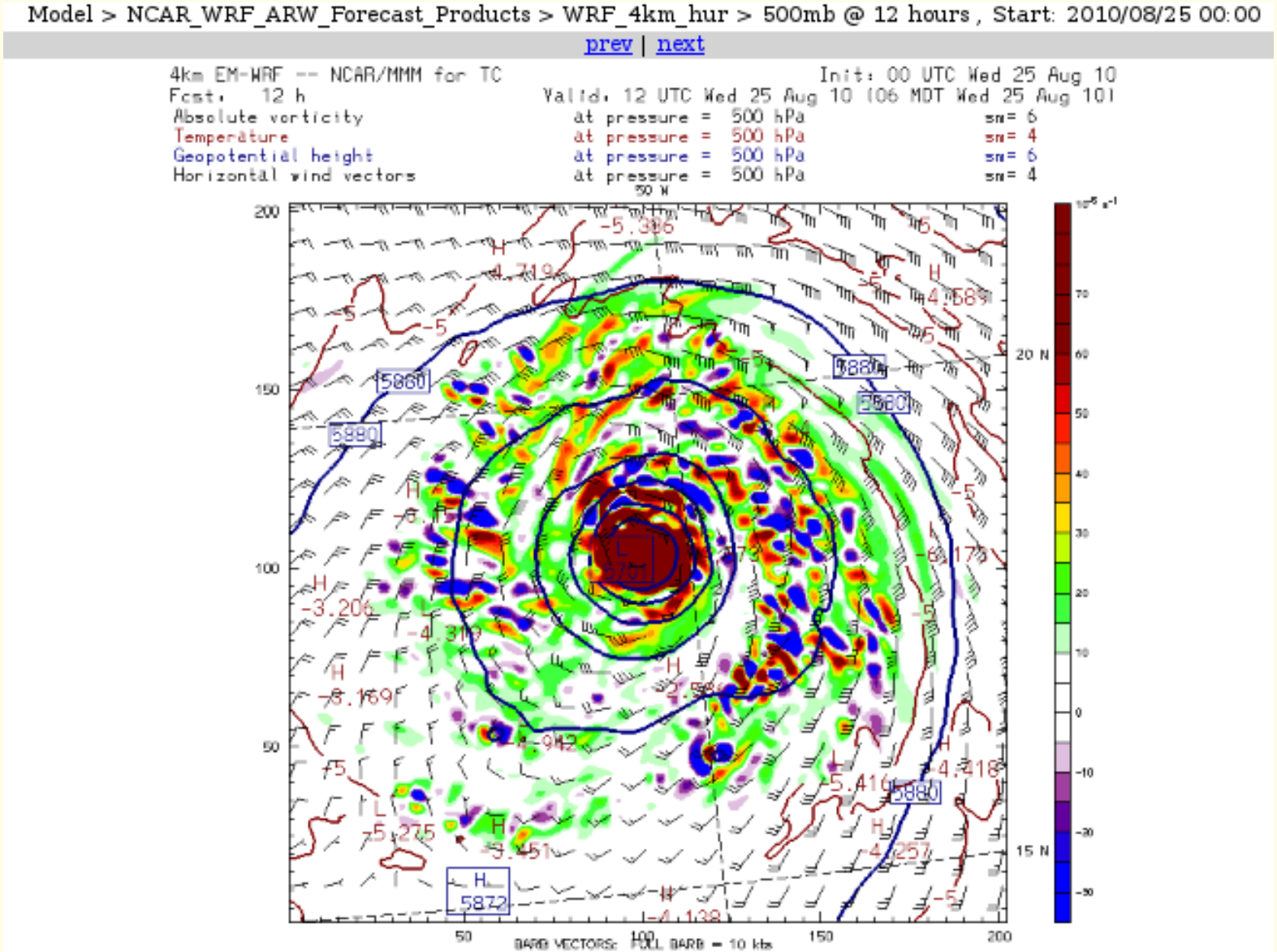
Forecast Times(UTC)	25 Aug 2010				
	00	06	12	18	
NCEP_EMC_Storm_Tracks - Analysis and Forecast from 2010/08/25 00:00 UTC					
CMC	0->				

FORECAST AND MODEL PRODUCTS

WRF Runs Available:

Forecast Times(UTC)	25 Aug 2010																							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
WRF_4km_hur - Analysis and Forecast from 2010/08/25 00:00 UTC																								
0-5km_shear	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
300mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
500mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
700mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
850mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
cloud_top_temp	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
mslp	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
precip_explicit	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
precip_mix_ratio	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
reflectivity	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
sfc_dew	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
sfc_winds	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
tot_precip_water	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr
WRF_4km_hur - Analysis and Forecast from 2010/08/25 12:00 UTC																								
0-5km_shear													00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr
300mb													00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr
500mb													00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr
700mb													00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr
850mb													00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr

Example Model Images



DAILY REPORTS

Typical Operations Reports

- Plan of the day
- Weather briefing
- Status of equipment
- Flight Plan
- Mission summary, science director
- Mission summary, flight scientist
- Photo archive
- Notes by other project participants

DAILY REPORTS

Typical Operations Reports

- Plan of the day
- Weather briefing
- Status of equipment
- Flight Plan
- Mission summary, science director
- Mission summary, flight scientist
- Photo archive
- Notes by other project participants

Generated via Forms for Consistency

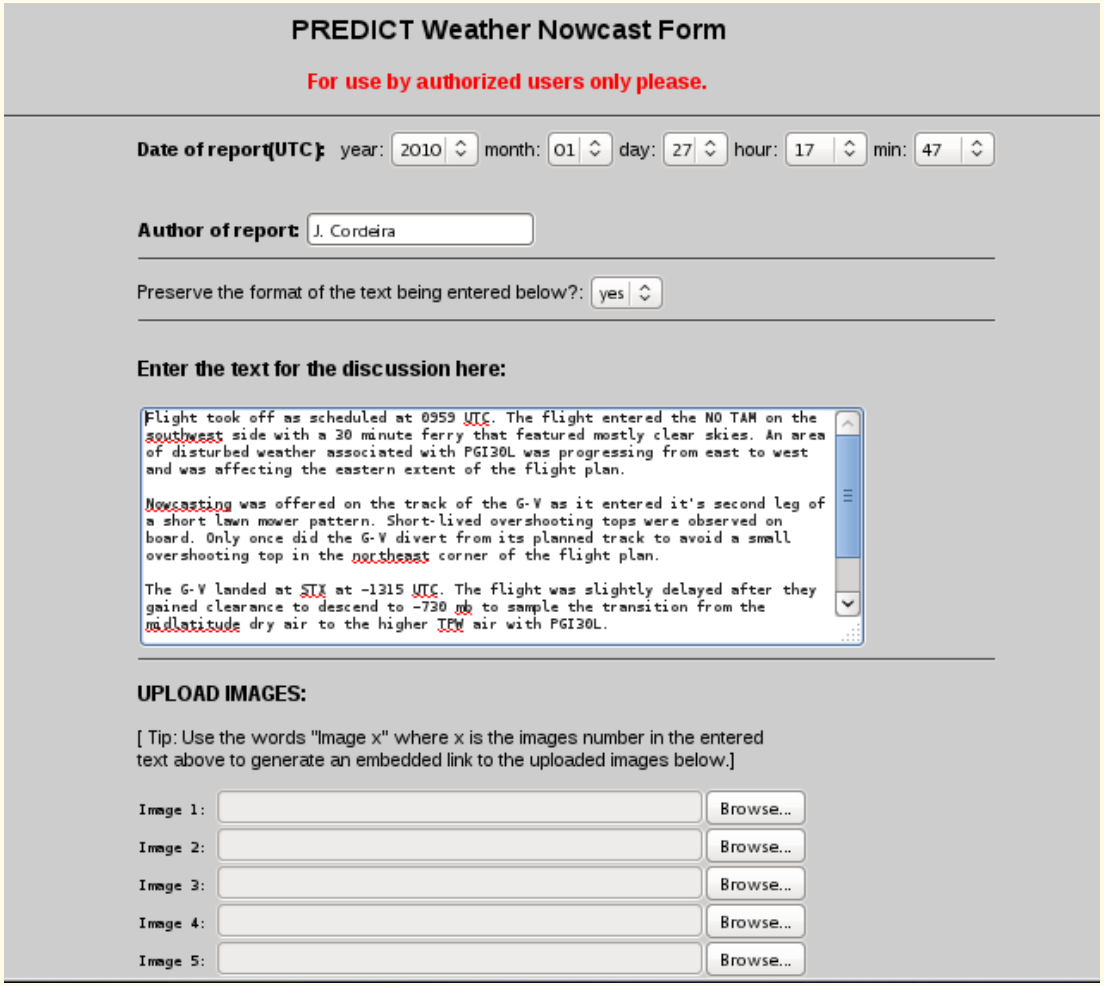
EXAMPLE: Weather Discussion

- Entry Boxes: date, author
- Text entry boxes for:
  - review of previous day's forecast and current conditions
  - 24 h outlook
  - 24-48 h outlook
  - extended outlook
- Ability to upload images and include links to them

DAILY REPORTS
Example: "Nowcast" Form

Procedure:

1. set date and name
2. type in entries, using "Image 1" etc to refer to images
3. set files for upload in image windows
4. click "upload" button (uses FTP, needs password)
5. result: text with links to images in the catalog



DAILY REPORTS

Example Weather Forecast - excerpt

Discussion: a. Synoptic Broad upper-level ENE flow was observed over the Southeast U.S. and the Gulf of Mexico on the poleward side of a weak trough that's persisted over the Caribbean (Fig. 2). The cold low mentioned in previous discussions was located to the NNW of Puerto Rico and continues to show signs of shearing apart as it merges with cyclonic flow on the southwest portion of the upper-level trough. Mid to upper-level flow does seem to be favoring the development of cyclonic vorticity northwest of this cold low near ~23N 72W. Extremely dry mid to upper-level air in the central Atlantic is evident in GOES water vapor imagery (Fig. 2), while two main areas of low to mid-level dry air can be seem in TPW imagery: a mid-latitude dry air intrusion with subsidence above is located to the west and southwest of PGI30L, while a SAL outbreak is located just east of PGI30L and north of PGI31L (Fig. 1). A deep layer ridge is currently steering PGI30I to the WSW, while the persistent region of deep convection near PGI31L continues to favor development of this large area of elongated (though consolidating) vorticity centered ~500-600 km SW of PGI31L. Farther east in the North Atlantic the weak shortwave over the western Sahara has lifted out and the ridge to the east has built westward. This has helped re-establish an E-W oriented subtropical

DAILY REPORTS

Example Weather Forecast - accompanying figure

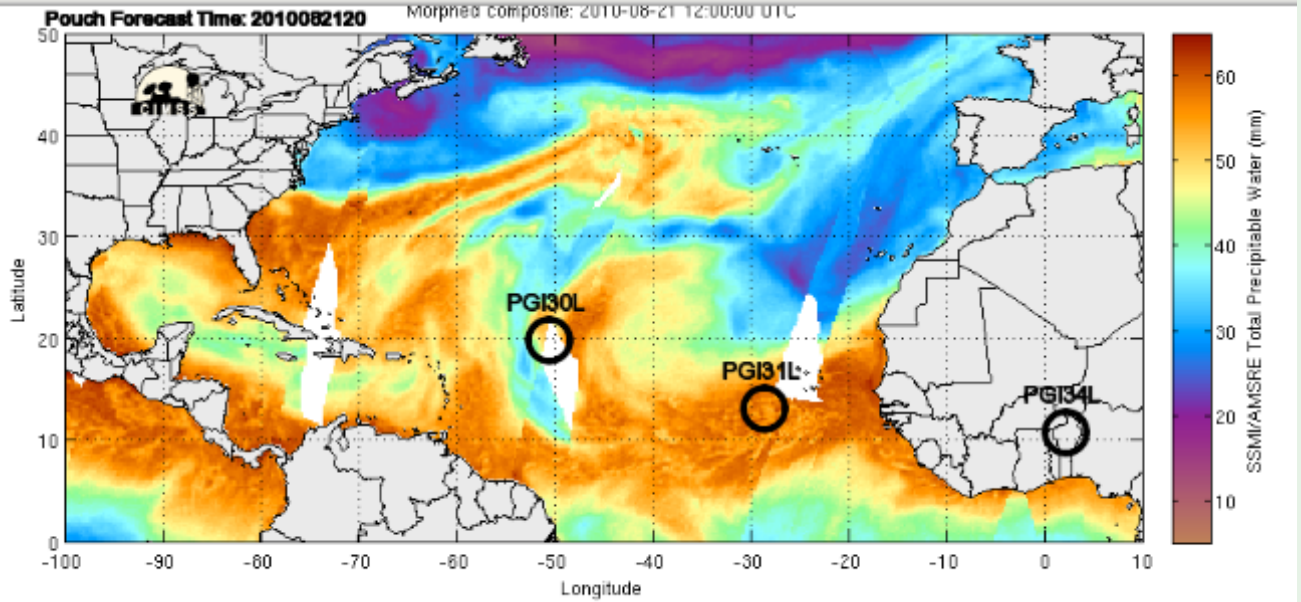


Fig. 1.

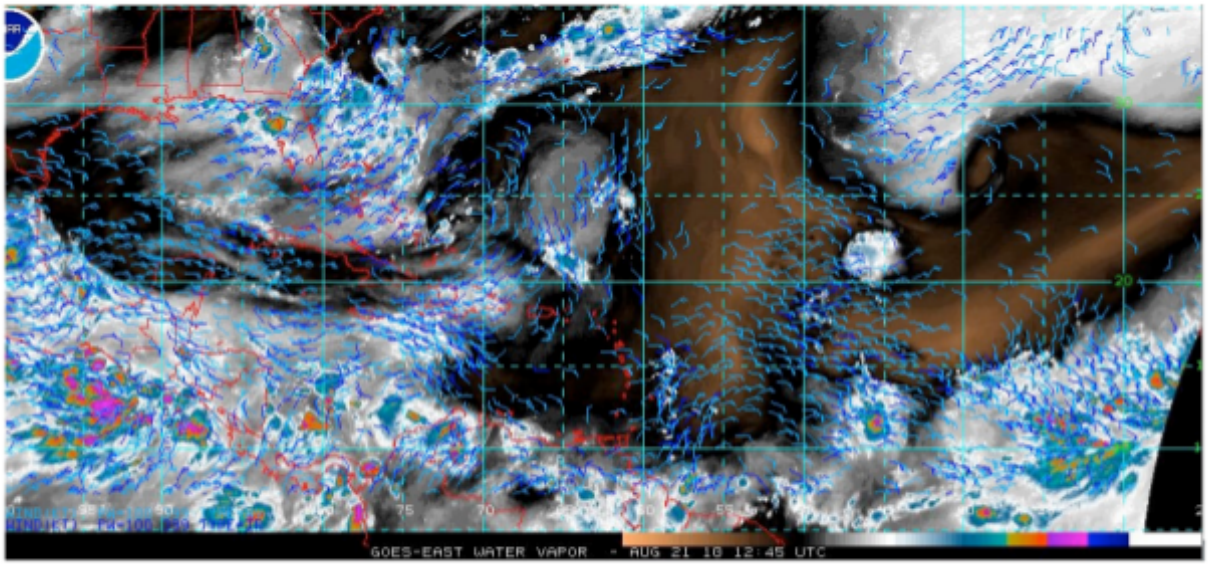


Fig. 2.

DAILY REPORTS

Example Weather Forecast - accompanying figure

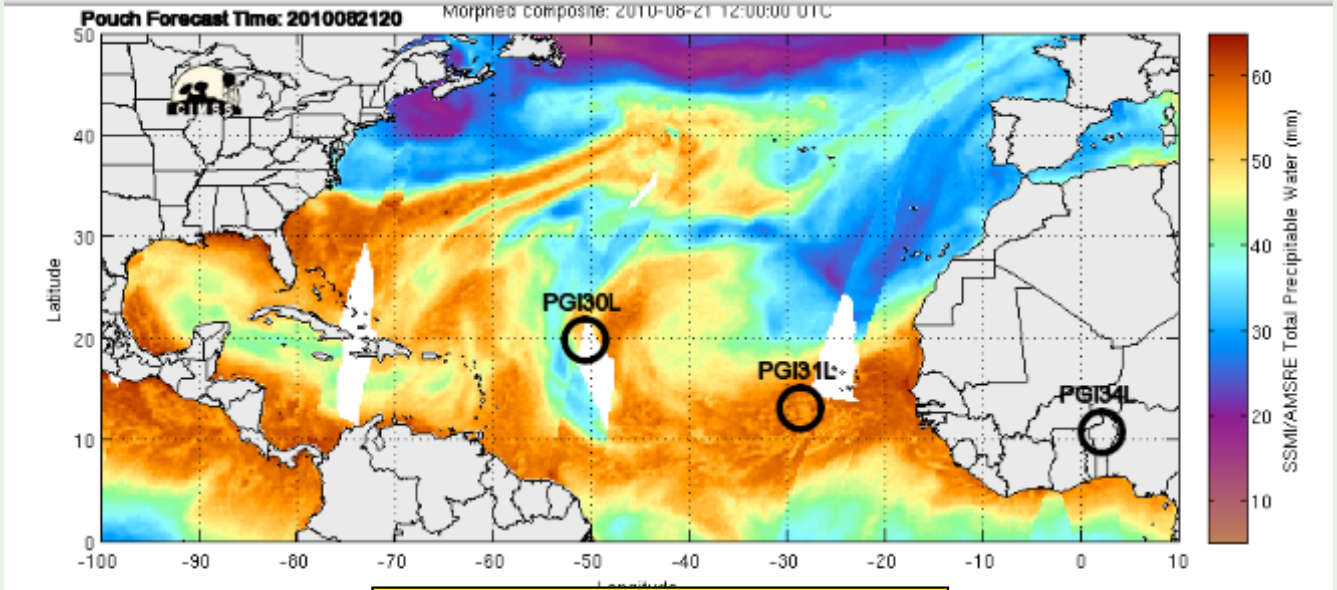


Fig. 1.

The forecast is prepared in advance, so everyone can follow along in the field catalog

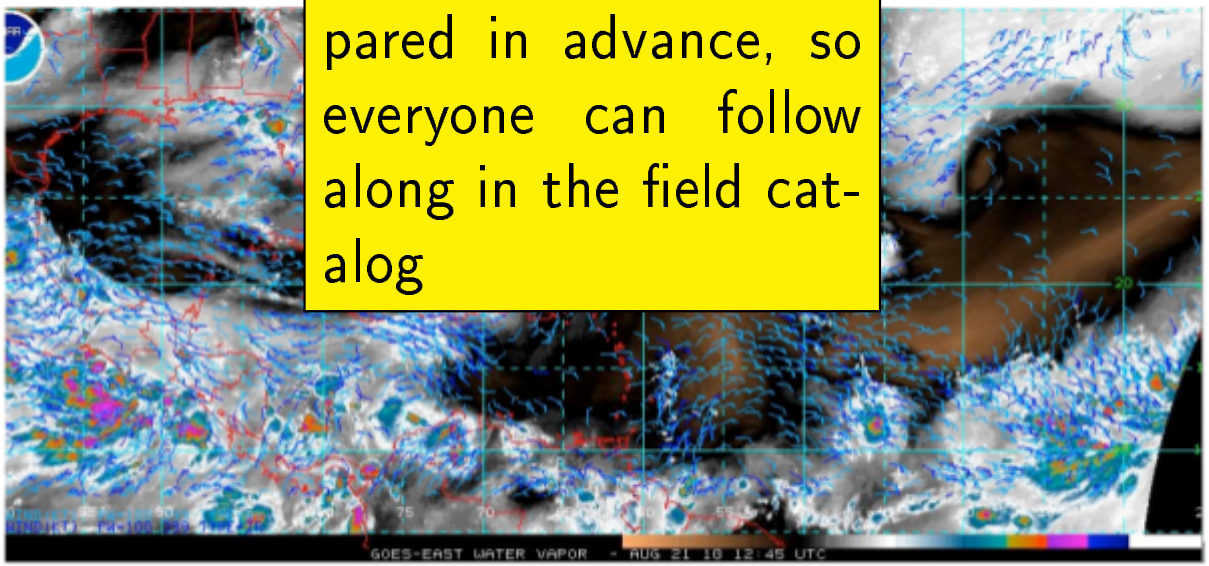


Fig. 2.

DAILY REPORTS

Example Weather Forecast - accompanying figure

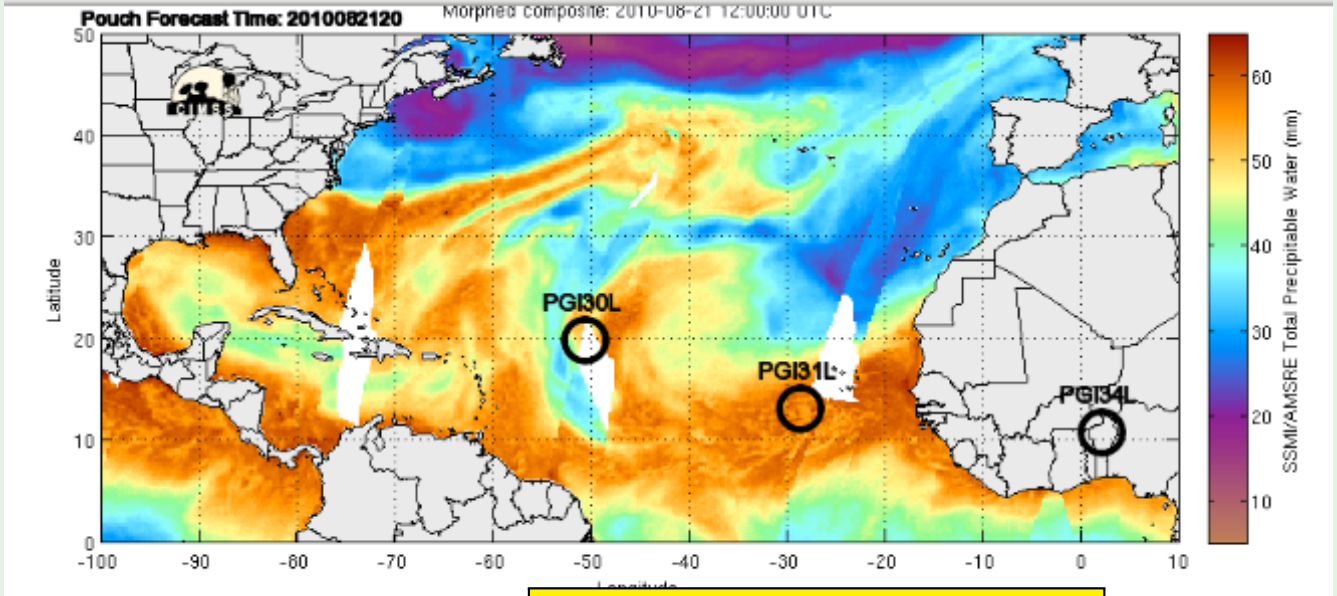


Fig. 1.

The forecaster usually shows the archived images at the appropriate places during the weather briefing

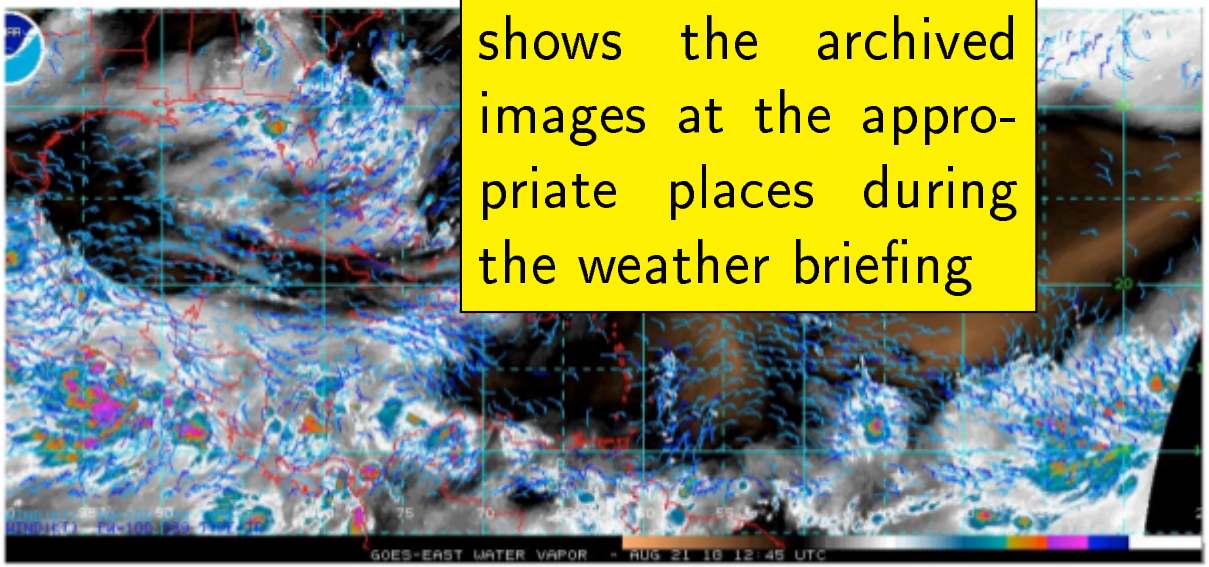


Fig. 2.

DAILY REPORTS

Flight Scientist Summary (excerpt)

Author of Report: Michael Bell
Type of Event: RF06, 2010/08/30 09:07 - 2010 08 30 18:07

Research flight 06 was conducted into PGI36L from Barbados after the evacuation of the G-V due to Hurricane Earl (Image 1). The models indicated a well-developed pouch, with sustained convection evident in satellite imagery near the center of the pattern prior to take-off. Take-off was 0900 UTC, with a 1:20 hour ferry to the first drop point. Surface winds were the strongest on the northeast side of the pattern, with whitecaps visible from the aircraft at 1222 UTC (Image 2). The proximity to Barbados allowed for an extended dropsonde pattern of 30 sondes, centered on the pouch sweet spot, and a low-level circulation became evident in the earth-relative frame from the real-time display (Image 3, 1319 UTC). Several overshooting tops were visible throughout the flight (Image 4, 1357 UTC) that frequently matched with the satellite identifications provided by the CIMSS algorithm, providing high

DAILY REPORTS
Status of GV Instrumentation

PREDICT NCAR_GV Instrument Status Report

Date of report(UTC): 2010/09/21 12:00
Author of report: schanot
Submitted at(UTC): 2010/09/22 15:15

Remaining flight hours: 56.6

General Comments:
Research flight rf21 (5.9 hrs) was flown into PGI-46. Pattern restricted by lack of access to Venezualian airspace. NASA DC-8 filed to cover, but was denied acces

INSTRUMENTS/SYSTEMS STATUS

= up; = provisional; = down ; = no report

RAF-Supplied Instrumentation		
1. **Airborne Data System**	**Comment:**	occational DSM drops on left wing
2. **Aircraft Position, Velocity and Attitude**	**Comment:**	
3. **Static Pressures**	**Comment:**	
4. **GPS and Pressure Altitude**	**Comment:**	Novatel/Globalstar GPS OK, Garmin required an in-flight reset
5. **Ambient Temperature**	**Comment:**	one high IWC events.
6. **Flow Angle Sensors, Radome**	**Comment:**	ADIFR & BDIFR affected by ice. Use IWD & IWS for 2D winds
Dew Point and Humidity		
7. **Dew Point sensors**	**Comment:**	DPR - OK; New DPL this flt. Range not adequate to reach low values - bad for flt
8. **TDL Humidity**	**Comment:**	
9. **PMS Liquid Water Sensor (King) (PLWC)**	**Comment:**	
10. **Raw Icing-Rate Indicator (RICE)**	**Comment:**	DSM would not boot. Bad power supply
11. **VCSEL Hygrometer**	**Comment:**	low laser power levels during fianl descent
Wing Stores		
12. **UHSAS**	**Comment:**	usual issues as flight progresses. water in filter?
13. **Cloud Droplet Probe (CDP)**	**Comment:**	DSM would not boot. Bad power supply
14. **Microwave Temp Profiler (MTP)**	**Comment:**	
15. **2D-C Particle Imager (25µ)**	**Comment:**	minor gaps. in-flight DSM auto reboots occurred
16. **Small Ice Detector (SID-II)**	**Comment:**	

OTHER MATERIAL IN THE PREDICT FIELD CATALOG

Summary of Missions

Flight	Date	System	Operations Area	Maximum Intensity During System Lifetime	Catalog Products	GV Dropsonde kmls	DC8 Dropsonde kmls	Flight Summary	Notes
RF01	Aug 15	Disturbance	Western Atlantic	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb Winds 250mb Winds		Mission Scientist Summary Science Director Summary	Shakedown/investigation of stalled frontal boundary and upper tropospheric shear line in the vicinity of the Bahamas.
RF02	Aug 17	PGI27L	Caribbean	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb Winds 250mb Winds		Mission Scientist Summary Science Director Summary	First mission into PGI27L which had only recently begun to develop deep convection.
RF03	Aug 18	PGI27L	Caribbean	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds		Mission Scientist Summary Science Director	Second mission into PGI27L during which a large MCS developed in the northeastern part of the flight region.

OTHER MATERIAL IN THE PREDICT FIELD CATALOG

Summary of Missions

Flight	Date	System	Operations Area	Maximum Intensity During System Lifetime	Catalog Products	GV Dropsonde kmls	DC8 Dropsonde kmls	Flight Summary	Notes
RF01	Aug 15	Disturbance	Western Atlantic	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb Winds 250mb Winds		Mission Scientist Summary Science Director Summary	Shakedown/investigation of stalled frontal boundary and upper tropospheric shear line in the vicinity of the Bahamas.
RF02	Aug 17	PGI27L	Caribbean	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb Winds 250mb Winds		Mission Scientist Summary Science Director Summary	First mission into PGI27L which had only recently begun to develop deep convection.
RF03	Aug 18	PGI27L	Caribbean	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds		Mission Scientist Summary Science Director	Second mission into PGI27L during which a large MCS developed in the northeastern part of the flight region.

OTHER MATERIAL IN THE PREDICT FIELD CATALOG

Summary of Missions

Science Director Summary	Shakedown/investigation of stalled frontal boundary and upper tropospheric shear line in the vicinity of the Bahamas.
Mission Scientist Summary Science Director Summary	First mission into PGI27 L which had only recently begun to develop deep convection.

OTHER MATERIAL IN THE PREDICT FIELD CATALOG

Summary of Missions

Flight	Date	System	Operations Area	Maximum Intensity During System Lifetime	Catalog Products	GV Dropsonde kmls	DC8 Dropsonde kmls	Flight Summary	Notes
RF01	Aug 15	Disturbance	Western Atlantic	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb Winds 250mb Winds		Mission Scientist Summary Science Director Summary	Shakedown/investigation of stalled frontal boundary and upper tropospheric shear line in the vicinity of the Bahamas.
RF02	Aug 17	PGI27L	Caribbean	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb Winds 250mb Winds		Mission Scientist Summary Science Director Summary	First mission into PGI27L which had only recently begun to develop deep convection.
RF03	Aug 18	PGI27L	Caribbean	Disturbance	Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds		Mission Scientist Summary Science Director	Second mission into PGI27L during which a large MCS developed in the northeastern part of the flight region.

OTHER MATERIAL IN THE PREDICT FIELD CATALOG

Summary of Missions

Catalog Products	GV Dropsonde kmls	DC8 Dropsonde kmls	Flight Summary	Notes
Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb Winds 250mb Winds		Mission Scientist Summary Science Director Summary	Shakedown/investigation of stalled frontal boundary and upper tropospheric shear line in the vicinity of the Bahamas.
Operational Model Research	Points 1000mb Winds 925mb Winds 850mb Winds 700mb Winds 500mb		Mission Scientist Summary Science Director Summary	First mission into PGI27 L which had only recently begun to develop deep convection.

OTHER MATERIAL IN THE PREDICT FIELD CATALOG

Research Products

Aircraft Products

- flight tracks
- dropsonde soundings (Skew-T plots)
- video from the GV flights

OTHER MATERIAL IN THE PREDICT FIELD CATALOG

Research Products

Aircraft Products

- flight tracks
- dropsonde soundings (Skew-T plots)
- video from the GV flights

Other Special Products

- Special soundings from the surface
- COSMIC soundings
- Special-use plots (sometimes generated for transmission to the GV)
- links to data archives containing preliminary “quick-look” data

SUMMARY

Main Points:

1. **Investigators find the field catalog useful:**
   (a) During operations, for mission planning
   (b) As a reference at the start of analysis.

SUMMARY

Main Points:

1. Investigators find the field catalog useful:
   (a) During operations, for mission planning
   (b) As a reference at the start of analysis.
2. **It is customizable to fit project needs.**

SUMMARY

Main Points:

1. Investigators find the field catalog useful:
   (a) During operations, for mission planning
   (b) As a reference at the start of analysis.
2. It is customizable to fit project needs.
3. **It is convenient to use, with forms that help standardize input.**

SUMMARY

Main Points:

1. Investigators find the field catalog useful:
   (a) During operations, for mission planning
   (b) As a reference at the start of analysis.
2. It is customizable to fit project needs.
3. It is convenient to use, with forms that help standardize input.
4. **It encourages progressive documentation.**

SUMMARY

Main Points:

1. Investigators find the field catalog useful:
   (a) During operations, for mission planning
   (b) As a reference at the start of analysis.
2. It is customizable to fit project needs.
3. It is convenient to use, with forms that help standardize input.
4. It encourages progressive documentation.

CONTACTS:

Further Information:

- Greg Stossmeister,
  gstoss@ucar.edu,
  303-497-8692
- Steve Williams,
  sfw@ucar.edu,
  303-497-8164
- Mike Daniels,
  daniels@ucar.edu,
  303-497-8793
- Al Cooper,
  cooperw@ucar.edu,
  303-497-1600